B.1.3

Fact Sheet

Commerce Industrial Chemicals
Milwaukee, Wisconsin
WID980795181

This Fact Sheet is prepared for the draft Resource Conservation and Recovery Act (RCRA) Permit which the United States Environmental Protection Agency (U.S. EPA) intends to issue to Commerce Industrial Chemicals located at 5611 W. Woolworth Ave., Milwaukee, Wisconsin. The activities which are subject to this draft permit, include a hazardous waste incinerator that the applicant proposes to install at it's Milwaukee plant, and an existing hazardous waste storage area. Since the applicant proposes to install an incinerator, it will become a major hazardous waste management facility. This Fact Sheet is being prepared in accordance with the requirements of 40 CFR Part 124.8.

A. DESCRIPTION OF FACILITY

1. General

Commerce Industrial Chemicals is a distributor of petroleum solvents, alcohols, ketones, esters, chlorinated solvents, glycols, glycol ethers, surfactants, color pigments, extender pigments, aluminum powders and pastes, as well as empty steel cans and steel and plastic pails.

Commerce Industrial Chemicals, Inc., (CIC) currently operates a waste storage facility qualified under 40 CFR 270 for interim status and is now regulated by the requirements of Wisconsin State Code NR 181. The Company intends to continue hazardous waste storage at its Milwaukee location and proposes to construct a hazardous waste incinerator at the plant.

CIC stores hazardous waste under interim status in containers generated through the emptying of returned deposit drums, draining of hoses, and washing out tank trucks. The facility also receives wastes from their customers who have purchased raw materials from them, used them in their cleaning or manufacturing process and returned them as wastes. The construction of the incinerator will allow hazardous waste from these and other sources to be incinerated on-site. The proposed waste treatment facility will consist of a feed storage tank and an incinerator.

2. Site Description

The plant consists of 1 brick and concrete block building of 45,000 square feet with an attached office area of 2,700 square feet. The existing container storage area for the hazardous waste is a 1,430 square foot area located on the east wall of the building. The proposed incinerator and tank storage area will be located inside the building over 50 feet from the facility's property line.

3. Process Description

The facility stores the following types and quantities of hazardous waste in containers prior to reclaiming or incineration.

096-54

Waste Type	Description	Quantity
Type I	Ignitable Waste (D001)	396,000 lb/year
	Spent non-halogenated solvents (F003)	88,000 lb/year
Type Is	Type I hazardous waste meeting exemption criteria under 40 CFR 264.340(b) with less than 100 ppm of 40 CFR 261, Appendix VIII hazardous constituents (D001 and F003)	(included with above)
Type II	Spent non-halogenated solvents (F005)	100,000 lb/year
	Solvent washes (K086)	100 lb/year
Type III	Spent halogenated solvents (F001 and F002)	24,000 lb/year

Hazardous waste is brought to the facility by trucks and unloaded at the dock area.

Upon arrival all loads of waste are examined by the facility's personnel in accordance with the waste analysis plan. Waste is stored in a drum storage area until processed. The drum storage area (which is in an enclosed building), will have a containment system consisting of a covered concrete base with curbs and jumps.

The proposed incinerator unit is a Kelly Company Model 380 B batch incinerator with a Kelley liquifire (TM) liquid waste injection system, equipped with special modifications that will allow it to burn hazardous wastes in compliance with 40 CFR 264, Subpart O. The incinerator has been designed to burn 13 to 17 gallons per hour of hazardous waste.

Waste Type*	Description	U.S. EPA Hazardous Waste Number
Type I and Is	Ignitable hazardous waste	D001
Type I	Spent non-halogenated solvents	F003
Type II	Spent non-halogenated solvents	F005
Type II	Solvent Washes	K086

* Each of these wastes may be burned at a rate between 13 to 17 gallons per hour. These wastes will be stored in the incinerator's on-board feed tank prior to incineration.

Consolidated Permit Actions Other Than RCRA

a. Air

The air emissions from a hazardous waste management facility are regulated by the U.S. EPA under RCRA, the Clean Air Act (CAA), and by the State of Wisconsin.

Under RCRA, the air emissions from the incinerator must meet certain performance standards as specified in 40 CFR 264.343 and this permit. The Permittee shall show compliance with these standards through monitoring from the incinerator and through periodic sampling and testing. The permit requires the Permittee to meet the requirements of 264.345 during the shakedown period. In addition to the RCRA permit, CIC must obtain a State of Wisconsin construction permit and operating permit.

Under the CAA, the U.S. EPA has promulgated regulations for the Prevention of Significant Deterioration (PSD) of air quality. Under these regulations, a new or modified facility which has the potential to emit 250 tons per year or more of any pollutant regulated under the CAA (or 100 tons per year if the facility is one of 28 specifically cited categories) must be reviewed and a PSD permit issued prior to construction. The U.S. EPA has determined, based on the applicant's RCRA art B permit application, that a PSD permit is not required.

The CAA also limits air emissions under National Emission Standards for Hazardous Air Pollutants (NESHAP). U.S. EPA reserves the rights to review and approve CIC's NESHAP application to construct the incinerator.

b. Water

CIC does not discharge process waters to surface water of the United States. Therefore, CIC does not require a National Pollution Discharge Elimination System (NPDES) permit under the Clean Water Act (CWA).

RMIT APPLICATION

e permit application dated herein is the February 9, 1983, permit plication and all subsequent amendments.

RPOSE OF THE PERMITTING PROCESS

e purpose of the permitting process is to afford the U.S. EPA, terested citizens and other governmental agencies the opportunity eval e the ability of the Permittee, CIC, to comply with the plic e hazardous waste management requirements promulgated under RA, prior to construction and operation of the hazardous waste

E. Summary of Basis for Permit Conditions

This section of the fact sheet provides a brief summary of the permit conditions in the draft permit and their basis. All citations of the regulations refer to the regulation as codified in Title 40 of the Code of Federal Regulations (40 CFR). On April 1, 1983, Parts 122 and 123 of the Consolidated Permit Regulations were recodified as parts 270 and 271. This fact sheet reflects the new coding system.

1. General Permit Conditions

Permit conditions I.A to I.H are regulatory requirements of 40 CFR Parts 270. These conditions are of a general nature and are applicable to all Hazardous Waste Management Facilities regulated pursuant to an U.S. EPA RCRA permit.

Standard Permit Conditions	Subject	Basis (40 CFR)
I.A	Effect of Permit	§270.4 §270.30(g)
I.B	Permit Actions	§270.30(f) §270.41 §270.42 §270.43
I.C	Severability	§270.32(a)
I.D.1	Duty to Comply	§270.30(a)
I.D.2	Duty to Reapply	§270.51
I.D.3	Permit Expiration	§270.30(b) §270.10(h)
I.D.4	Need to Halt or Reduce Activity Not a Defense	§270.30(c)
I.D.5	Duty to Mitigate	§270.30(d)
I.D.6	Proper Operation and Maintenance	§270.30(e)
I.D.7	Duty to Provide Information	§270.30(h)

Subject	Basis of (40 CFR)
Inspection and Entry	§270.30(i)
Monitoring and Records and Retention of Records	§270.30(j)
Notices of Planned Physical Facility Changes	§270.30(l)(1)
Certification of Construction	§270.30(l)(2)
Anticipated Noncompliance	§270.30(l)(2)
Transfer of Permits	§270.40 §270.30(l)(3) §264.12(c)
Compliance Schedules	§270.33
Twenty-four Hour Reporting of Hazardous Noncompliance	§270.30(l)(6) §264.56
Other Noncompliance	§270.30(l)(10)
Other Information	§270.30(l)(11)
Signatory Requirement	§270.11 §270.30(k)
Confidential Information	§270.12
Documents to be Submitted	§270.14(b)(2) §270.14(b)(3) §264.16(d) §264.37 §264.52 §264.143 §264.147
Documents To Be Maintained At Facility Site	§264.13(b) §264.53(a) §264.112(a) §264.142(a) §264.16(d) §264.73 §264.15(b)

Permit Conditions	Subject	Basis (40 CFR)
II.K.1	Operating Record and Availability, Retention, and Disposition of Records	§264.73 §264.74
II.K.2	Biennial Reports	§264.75
II.L.1	Closure Performance Standard	§264.111
II.L.2	Amendment of Closure Plan	§264.112(b)
II.L.3	Notification of Closure	§264.112(c)
II.L.4	Time Allowed for Closure	§264.113(a)
II.L.5	Disposal or Decontamination of Equipment	§264.114
II.L.6	Certification of Closure	§264.115
II.M	Cost Estimate for Facility Closure	§264.142
II.N	Financial Assurance for Facility Closure	§264.143
II.O	Liability Requirement	§264.147
II.P	Incapacity of Owners or Operators, Guarantors, or Financial Institutions	§264.148

3. Containers

Conditions III.A to III.H are specific to containers and implement the regulatory requirements of 40 CFR Part 264, Subpart I, Sections 264.170 to 264.178.

Specific Permit Conditions	Subject	Basis (40 CFR)
III.A	Waste Identification and Container Storage Capacity	Application (Part A)
III.B	Condition of Containers	§264.171
III.C	Compatibility of Waste	§264.172
III.D	Management of Containers	§264.173
III.E	Containment	§264.175
III.F	Special Requirements for Ignitable or Reactive Waste	§264.176
III.G	Special Requirements for Incompatible Wastes	§264.177
III.H	Compliance Schedule	*

* The Permittee will be required to construct a secondary containment system used for the storage of Type Is, I, II, and III hazardous wastes that will comply with 40 CFR §264.175. The U.S. EPA must receive proper certification that this activity has been completed within 45 days following the date of issuance of this permit. If this certification is not submitted, the storage of hazardous waste in containers must cease.

4. Tanks

The conditions IV.A to IV.F are specific to tanks and implement the regulatory requirements of 40 CFR Part 264, Subpart J, Sections 264.190 to 264.199.

Specific Permit Conditions	Subject	Basis (40 CFR)
IV.A	Waste Identification	Application (Part A)
IV.B	Design of Tanks	§264.191
IV.C	General Operating Requirements	§264.192
IV.D.1	Special Requirements for Ignitable or Reactive Waste	§264.198(a)(2)
IV.D.2	Record Documentation	§264.17(c)
IV.D.3	Buffer Zone Requirement	§264.198(b)
IV.E.1	Special Requirements for Incompatible Wastes	§264.17(b)
IV.E.2	Record Documentation	§264.17(c)
IV.F	Compliance Schedule	*

* The Permittee will be required to install an overflow return line in the feed tank to the hazardous waste incinerator and a separate feed line for Type Is hazardous waste. The installations will enable the Permittee to comply with with 40 CFR 264.192(b) and this permit. The U.S. EPA must receive proper certification that this activity has been completed before the storage of hazardous waste in tanks may begin, and incineration of hazardous waste may occur.

5. Incinerators

The conditions V.A to V.E are specific to the incinerator and implement the regulatory requirements of 40 CFR Part 264, Subpart O, Sections 264.340 to 264.351, and Part 270, Sections 270.42, 270.10, 270.19, and 270.62.

Specific Permit Conditions	Subject	Basis (40 CFR)
V.A	Construction	§270.10(f)
V.B	Performance Standards	§264.343
V.C	Limitation on Wastes	§264.340(b) §264.341 §264.345(b)(6)
V.D.1	Combustion Temperature	§264.345(b)(3) §270.19(c)
V.D.2	Combustion Gas Velocity	§264.345(b)(4) §270.19(c)
V.D.3	Carbon Monoxide Concentration	§264.345(b)(1) §270.19(c)
V.D.4	Start-Up and Shut-Down	§264.345(c) §270.19(c)
V.D.5	Fugitive Emissions	§264.345(d) §270.19(c)
V.D.6	Waste Feed Cutoff	§264.345(e) §270.19(c)
V.D.7	Facility Monitoring	§264.347
V.D.8	Other Testing	§264.347(a)(3) §264.345(b)(6)
V.D.9	Recordkeeping	§264.347(d)
V.D.10	Cessation of Operation	§264.345(f)
V.E	Compliance Schedule	*

* The Permittee will be required to construct a fence around the incinerator in accordance with 40 CFR 264.14, and submit as-built diagrams showing

that the incinerator and fence have been constructed in a manner consistent with the terms of this permit and 40 CFR 264, Subpart O. The Permittee must revise the incinerator's control system such that waste feed cut-off will occur whenever the secondary chamber temperature, waste feed rate, combustion gas velocity, and carbon monoxide emissions deviate from required ranges. The U.S. EPA must receive proper certification under I.D.11 before the incineration of hazardous waste may begin.

6. Incinerator Shakedown Period

The conditions VI.A to VI.B are specific to the incinerator and implement the regulatory requirements of 40 CFR Part 264, Subpart O, Sections 264.340 to 264.351, and Part 270, Sections 270.42, 270.10, and 270.62.

Specific Permit Conditions	Subject	Basis (40 CFR)
VI.A	Shakedown Period	§264.344(c)(1)
VI.B	Compliance Schedule	*

* The Permittee must submit calibration charts 1) relating waste feed in gallons/hr for the flow meter installed on the incinerator to comply with 40 CFR 264.345(b)(2) and 2) relating fan amperage or an alternate flow monitoring parameter to combustion gas volumetric flow rate and combustion zone negative pressure to comply with 40 CFR 264.345(b)(4) and 264.345(d), respectively, and the terms of this permit. These must be developed during the shakedown phase of operation. Type II hazardous wastes may not be incinerated until these charts have been reviewed by U.S. EPA under I.G. In accordance with the certification requirement of I.D.11, and this permit, a letter of certification stating that the shakedown period has been successfully completed must be received by U.S. EPA before burning of Type II hazardous waste will be permitted.

RCRA DRAFT PERMIT SIGN-OFF

PART I. BACKGROUND

FACILITY NAME: Commerce Industrial Chemicals *

FACILITY LOCATION: 5611 Woolworth Ave - Milwaukee

RCRA ID NUMBER: WID980795181

TYPE OF PERMIT → MAJOR MODIFICATION to Issued Permit

- X Storage
- X Container
- ___ Tank
- ___ Waste Pile
- ___ Surface Impoundme
- ___ Di

Note: Only changes made to issued permit are those requested by facility. Stylistic changes and language style are prohibited due to necessity to duplicate original permit incinerator/tank references. We are also 1985 - boilerplate.

PART II. REVIEW PACKAGE CONTENT

- ✓ Draft ~~Permit~~ w/Att (MAJOR MO
- ✓ Draft Public Notic
- ___ Administrative Rec
- ___ Corrective Acti
- ___ Screening for E
- ___ Facility Managem
- ___ (Other) ___

Already accounted for during original permit issuance & close in 1985.

PART III. CONCURRENCES (6-6181)

		INITIALS	DATE	AGREE	DISAGREE
1.	TECH. PERMIT CONTACT	ADebus	3-6-87	(✓)	( )
2.	CHIEF, ~~STATE~~ TECHNICAL UNIT (MN/WI)	[illegible]	3-6-87	(✓)	( )
3.	TECHNICAL EXPERT (If applicable)	___	___	(✓)	( )
4.	SECTION CHIEF, TPS (Acting)	[illegible]	3/10/87	(✓)	( )
5.	SECTION CHIEF, ~~PMS~~	[illegible]	3/9/87	(✓)	( )
5a.	SECRETARY, TPS	[illegible]	3/23/87	(✓)	
6.	ASST. REG. COUNSEL, (ORC) (received ORC 3/24/87)	[illegible]	4/2/87	(✓)	( )
7.	SECTION CHIEF SWERB (ORC)	DMS	4/6/87 (rec'd 4/6)	(✓)	( )
	maxwell - typo altered - Pls Exm		4/30/87		
8.	BRANCH CHIEF, SWERB (ORC)	by [illegible] acting	5/1/87	(✓)	( )
8a.	SECRETARY, TPS	[illegible]	5/5/87	(✓)	
9.	CHIEF, SOLID WASTE BRANCH	[illegible]	5/12/87	(✓)	( )

Karl has seen these and initialed. Gloria.

PART IV. PUBLIC NOTICE

10.	CHIEF, AUTHORIZATION AND INFORMATION SECTION (PMS)	___	___
11.	PUBLIC PARTICIPATION SPECIALIST	Sms	3/18/87

___ Public Notice Date

0964 49

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

Name of Permittee: Commerce Industrial Chemicals

Facility Location: 5611 W. Woolworth Ave., Milwaukee, Wisconsin

EPA Identification Number: WID980795181

Effective Date:

Expiration Date: This permit will have a ten year duration.

Authorized Activities

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 USC §6901 et seq., commonly known as RCRA) and regulations promulgated thereunder by the U.S. Environmental Protection Agency (U.S. EPA) codified and to be codified in Title 40 of the Code of Federal Regulations), a permit is issued to Commerce Industrial Chemicals (hereafter called the Permittee), to operate a hazardous waste storage facility located in Milwaukee, Wisconsin at latitude 88 58' 15" and longitude 43 08' 00". You are authorized to conduct the following hazardous waste management activities:

X Storage	X Treatment	___ Disposal
X Container	___ Tank	___ Injection Well
X Tank	___ Surface Impoundment	___ Landfill
___ Waste Pile	X Incinerator	___ Land Application
___ Surface Impoundment	___ Other	___ Ocean Disposal
		___ Surface Impoundment

Applicable Regulations:

The conditions of this permit were developed in accordance with the applicable provisions of 40 CFR Part:

X 261	X 264, Subpart G	___ 264, Subpart L
X 262	X 264, Subpart H	___ 264, Subpart M
X 264, Subparts A-E	X 264, Subpart I	___ 264, Subpart N
___ 264, Subpart F	X 264, Subpart J	X 264, Subpart O
	___ 264, Subpart K	X 270

Permit Approval

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 40 CFR Parts 260 through 264 and 270 and 124 as specified in the permit. Applicable regulations are those which are in effect on the date of issuance of this permit (see 40 CFR §270.32(c)).

This permit is based on the assumption that the information submitted in the permit application attached to the Permittee's letter dated February 9,-1983, and any subsequent amendments (hereafter referred to as the application) is accurate and that the facility will be constructed and operated as specified in the application. Any inaccuracies found in this information may be grounds for the termination or modification of this permit (see 40 CFR §270.42 and §270.43) and potential enforcement action. The Permittee must inform U.S. EPA of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

Issued this _____ day of _____

by _____
Basil G. Constantelos, Director
Waste Management Division

I. STANDARD CONDITIONS

A. EFFECT OF PERMIT

The Permittee is allowed to store hazardous waste in accordance with the conditions of this permit. Any storage of hazardous waste not authorized in this permit is prohibited. Compliance with this permit constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under Section 3013 or Section 7003 of RCRA, Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9606(a), commonly known as CERCLA), or any other law providing for protection of public health or the environment.

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 270.41, 270.42, and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. DUTIES AND REQUIREMENTS

1. Duty to Comply. The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, constitutes a violation of RCRA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

2. Duty to Reapply. If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must submit a complete application for a new permit at least 180 days before this permit expires.

3. Permit Expiration. The duration of this permit shall be ten years from the effective date of the permit in conformance with the provisions of 40 CFR 270.50. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (see 40 CFR 270.13-270.29) and through no fault of the Permittee the Regional Administrator has not issued a new permit as set forth in 40 CFR 270.15.

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate. The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

6. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of the permit.

7. Duty to Provide Information. The Permittee shall furnish to the Regional Administrator, within a reasonable time, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

8. Inspection and Entry. The Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

   (a) Enter at reasonable times upon the Permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

9. Monitoring and Records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, (July, 1982) or an equivalent method as specified in the attached Waste Analysis Plan.

(b) The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or record. These periods may be extended by request of the Regional Administrator at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

(c) Records of monitoring information shall specify:

(i) The dates, exact place, and times of sampling or measurements;

(ii) The individuals who performed the sampling or measurements;

(iii) The dates analyses were performed;

(iv) The individuals who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

10. Reporting Planned Changes. The Permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility.

11. Certification of Construction or Modification. The Permittee may:

1. Not commence the shakedown phases of operation for the hazardous waste incinerator; or

2. Not commence the incineration of Type II hazardous waste at the facility; or

3. Not continue storing hazardous wastes in containers; or

4. Not store hazardous waste in the incinerator feed tank until:

(a) The Permittee has submitted to the Regional Administrator by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and;

(b) (i) The Regional Administrator has inspected the modified and newly constructed facility and finds it is in compliance with the conditions of the permit; or;

(ii) The Regional Administrator has either waived the inspection or has not within 15 days notified the Permittee of his or her intent to inspect.

12. Anticipated Noncompliance. The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

13. Transfer of Permits. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 40 CFR 270.41(b)(2) or 270.42(d). Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270.

14. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

15. Twenty-four Hour Reporting. The Permittee shall report to the Regional Administrator any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:

    (a) Information concerning the release of any hazardous waste which may endanger public drinking water supplies.

    (b) Any information of a release or discharge of hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

        (i) Name, address, and telephone number of the owner or operator;

        (ii) Name, address, and telephone number of the facility;

        (iii) Date, time, and type of incident;

        (iv) Name and quantity of materials involved;

        (v) The extent of injuries, if any;

        (vi) An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

        (vii) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee need not comply with the five day written notice requirement if the Regional Administrator waives the requirement and the Permittee submits a written report within fifteen days of the time the Permittee becomes aware of the circumstances.

16. Other Noncompliance. The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time monitoring reports, as required by this permit are submitted. The reports shall contain the information listed in condition I.D.15.

17. Other Information. Whenever the Permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator, the Permittee shall promptly submit such facts or information.

E. Signatory Requirement. All reports or other information requested by the Regional Administrator shall be signed and certified as required by 40 CFR 270.11.

F. Confidential Information. The Permittee may claim confidential any information required to be submitted by this permit in accordance with 40 CFR 270.12.

G. Documents To Be Submitted Prior to Operation. The Permittee must submit:

1. As-built drawings showing that a fence has been constructed around the incinerator in accordance with 40 CFR 264.14 and this permit. These drawings must be received before the shakedown phase of incineration may commence.

2. As-built drawings showing that the incinerator and automatic waste feed cut-off systems have been constructed in accordance with this permit, and that the overflow return line has been installed in the incinerator feed tank. These drawings must be received before the shakedown phase of incineration may commence.

3. As-built drawings for the secondary containment system 45 days following the effective date of this permit.

4. Calibration charts relating fan amperage or an alternative flow monitoring parameter to combustion gas volumetric flow rate and combustion zone measure shall also be submitted.

5. Calibration charts relating waste feed in gallons/hr for the flow meter installed on the incinerator to comply with 40 CFR 264.345(b)(2). I.G.d and e. must be received by U.S. EPA prior to incineration of Type II hazardous wastes in order to comply with this permit.

H. Documents To Be Maintained at Facility Site. The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and amendments, revisions and modifications to these documents:

1. Waste analysis plan as required by 40 CFR 264.13 and this permit.

2. Personnel training documents and records as required by 40 CFR 264.16(d) and this permit.

3. Contingency plan as required by 40 CFR 264.53(a) and this permit.

4. Closure plan as required by 40 CFR 264.112(a) and this permit.

5. Cost estimate for facility closure as required by 40 CFR 264.142(d) and this permit.

6. Operating record as required by 40 CFR 264.73 and this permit.

7. Inspection schedules as required by 40 CFR 264.15(b) and this permit.

II. GENERAL FACILITY CONDITIONS

A. Design and Operation of Facility. The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

B. Required Notice.

1. The Permittee shall notify the Regional Administrator in writing at least four weeks in advance of the date the Permittee expects to receive hazardous waste from a foreign source. Notice of subsequent shipments of the same waste from the same foreign source in the same calendar year is not required.

2. When the Permittee is to receive hazardous waste from an off-site source (except where the Permittee is also the generator), he must inform the generator in writing that he has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the operating record (See Condition II.K.1).

C. General Waste Analysis. The Permittee shall follow the procedures described in the attached waste analysis plan, Attachment 1.

D. Security. The Permittee shall comply with the security provisions of 40 CFR 264.14(b)(1) and (c).

E. General Inspection Requirements. The Permittee shall follow the inspection schedule, Attachment 2. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 40 CFR 264.15(c). Records of inspections shall be kept as required by 40 CFR 264.15(d).

F. Personnel Training. The Permittee shall conduct personnel training as required by 40 CFR 264.16. This training program shall follow the attached outline, Attachment 3. The Permittee shall maintain training documents and records as required by 40 CFR 264.16(d) and (e).

G. General Requirements for Ignitable, Reactive, or Incompatible Waste. The Permittee shall comply with the requirements of 40 CFR 264.17(a).

H. Preparedness and Prevention

1. Required Equipment. At a minimum, the Permittee shall equip the facility with the equipment set forth in the contingency plan, Attachment 4 as required by 40 CFR 264.32.

2. Testing and Maintenance of Equipment. The Permittee shall test and maintain the equipment specified in the previous permit condition as necessary to assure its proper operation in time of emergency.

3. Access to Communications or Alarm System. The Permittee shall maintain access to the communications or alarm system as required by 40 CFR 264.34.

4. Required Aisle Space. At a minimum, the Permittee shall maintain aisle space as required by 40 CFR 264.35.

5. Arrangements with Local Authorities. The Permittee shall attempt to make arrangements with State and local authorities as required by 40 CFR 264.37. If State or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

I. Contingency Plan.

1. Implementation of Plan. The Permittee shall immediately carry out the provisions of the contingency plan, Attachment 4, and follow the emergency procedures described by 40 CFR 264.56 whenever there is a fire, explosion, or release of hazardous waste or constituents which threatens or could threaten human health or the environment.

2. Copies of Plan. The Permittee shall comply with the requirements of 40 CFR 264.53.

3. Amendments to Plan. The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 40 CFR 264.54.

4. Emergency Coordinator. The Permittee shall comply with the requirements of 40 CFR 264.55, concerning the emergency coordinator.

J. Manifest System. The Permittee shall comply with the manifest requirements of 40 CFR 264.71, 264.72, and 264.76.

K. Recordkeeping and Reporting.

1. Operating Record. The Permittee shall maintain a written operating record at the facility in accordance with 40 CFR 264.73(a), (b)(1), (2), (3), (4), (5), (6), (7), and (8).

2. Biennial Report. The Permittee shall comply with the biennial report requirements of 40 CFR 264.75.

L. Closure.

1. Performance Standard. The Permittee shall close the facility as required by 40 CFR 264.111 and in accordance with the closure plan, Attachment 5.

2. Amendment to Closure Plan. The Permittee shall amend the closure plan in accordance with 40 CFR 264.112(b) whenever necessary.

3. Notification of Closure. The Permittee shall notify the Regional Administrator at least 180 days prior to the date he expects to begin closure.

4. Time Allowed For Closure. After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste in accordance with the schedule specified in the closure plan, Attachment 5. After receiving the final volume of hazardous waste, the Permittee shall complete closure activities in accordance with the schedule specified in the closure plan, Attachment 5.

5. Disposal or Decontamination of Equipment. The Permittee shall decontaminate and/or dispose of all facility equipment as required by 40 CFR 264.114 and the closure plan, Attachment 5.

6. Certification of Closure. The Permittee shall certify that the facility has been closed in accordance with the specifications in the closure plan as required by 40 CFR 264.115.

M. Cost Estimate for Facility Closure. The Permittee's original closure cost estimate, prepared in accordance with 40 CFR 264.142(a), is specified in Attachment 5.

1. The Permittee must adjust the closure cost estimate for inflation within 30 days after each anniversary of the date on which the first closure cost estimate was prepared, as required by 40 CFR 264.142(b).

2. The Permittee must revise the closure cost estimate whenever there is a change in the facility's closure plan as required by 40 CFR 264.142(c).

3. The Permittee must keep at the facility the latest closure cost estimate as required by 40 CFR 264.142(d).

N. Financial Assurance for Facility Closure. The Permittee shall demonstrate continuous compliance with 40 CFR 264.143 by providing documentation of financial assurance, as required by 40 CFR 264.151, in at least the amount of the cost estimates required by permit condition II.M. Changes in financial assurance mechanisms must be approved by the Regional Administrator pursuant to 40 CFR 264.143.

O. Liability Requirements. The Permittee shall demonstrate continuous compliance with the requirements of 40 CFR 264.147 and the documentation requirements of 40 CFR 264.151, including the requirements to have and maintain liability coverage for sudden and accidental occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs.

P. Incapacity of Owners or Operators, Guarantors, or Financial Institutions.

The Permittee shall comply with 40 CFR 264.148 whenever necessary.

III. STORAGE IN CONTAINERS

A. Waste Identification. The Permittee may store the following wastes in containers at the facility, subject to the terms of this permit:

Waste Type	Waste Code
a. Ignitable Wastes (Type I, Type Is)	D001
b. Spent halogenated solvents used in degreasing (Type III)	F001
c. Spent halogenated solvents (Type III)	F002
d. Spent non-halogenated solvents (Type II, Type Is)	F003
e. Spent non-halogenated solvents (Type II)	F005
f. Solvent washes and sludges (Type II)	K086

These wastes were indicated on page 3 of Form 3 of Part A of the applicant's Hazardous Waste Permit Application, Attachment 6. The Permittee may store wastes in 55-gallon capacity drums provided that the total quantity of drums stored in the secondary containment area never exceeds 396 at any one time. Containers of Type III hazardous waste, which may not be incinerated, shall be physically separated from Type I and Type II hazardous wastes.

B. Condition of Containers. If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit.

C. Compatibility of Waste with Containers. The Permittee shall assure that the ability of the container to contain the waste is not impaired as required by 40 CFR 264.172.

D. Management of Containers. The Permittee shall manage containers as required by 40 CFR 264.173.

E. Containment. The Permittee shall construct a secondary containment system and maintain the containment system in accordance with the requirements of 40 CFR 264.175 as specified in the attached plans and specifications, Attachment 7.

E. Containment. The Permittee shall construct a secondary containment system and maintain the containment system in accordance with the requirements of 40 CFR 264.175 as specified in the attached plans and specifications, Attachment 7.

F. Special Requirements for Ignitable or Reactive Waste. The Permittee shall not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility's property line.

G. Special Requirements for Incompatible Waste.

1. Prior to placing incompatible waste or incompatible wastes and materials in the same container, the Permittee shall comply with 40 CFR 264.17(b) as specified in Attachment 7.

2. The Permittee shall not place hazardous waste in an unwashed constainer that previously held an incompatible waste or material.

3. The Permittee shall separate containers of incompatible wastes as indicated in the attached plans, Attachment 7, as required by 40 CFR 264.177(c).

4. The Permittee must document compliance with III.G (1) and (2) as required by 40 CFR 264.17(c) and place this documentation in the operating record (condition II.K.1).

H. Compliance Schedule. Within 45 days from the effective date of this permit, the Permittee shall construct a secondary containment system to comply with 40 CFR 264.175. Pursuant to the certification requirement of I.D.11, the storage of hazardous wastes in containers must cease if the containment system is not constructed within the required time frame.

IV. STORAGE IN TANKS

A. Waste Identification. The Permittee may store the following hazardous wastes in the feed tank to the incinerator at the facility, subject to the terms of this permit:

Waste type	Waste Code
a. Ignitable Wastes (Type I, Type Is)	D001
b. Spent non-halogenated solvents (Type I, Type Is)	F003
c. Spent non-halogenated solvents (Type II)	F005
d. Solvent washes used in the formulation of printing ink (Type II)	K086

These wastes were indicated on page 3 of form 3 of Part A of the Permittee's Hazardous Waste Permit Application, Attachment 6. The incinerator feed tank has been fabricated to specifications listed in Attachment 8. These wastes shall not be pumped into the tank unless the overflow return line is operating.

B. Design of Tanks. The Permittee shall maintain all tanks as required by 40 CFR 264.191, as specified in the attached plans and specifications, Attachment 8. The Permittee shall maintain the minimum shell thickness of 0.098 inches at all times to ensure sufficient shell strength. The shell thickness of the tank must be determined annually, and records of testing must be maintained as part of the operating record.

C. General Operating Requirements. The Permittee shall prevent overfilling of tanks, as required by 40 CFR 264.192(b), by the methods specified in Attachment 8.

D. Special Requirements for Ignitable or Reactive Wastes.

1. The Permittee shall not place ignitable or reactive waste in a tank unless the procedures described in Attachment 8 are followed, as required by 40 CFR 264.198(a).

2. The Permittee shall document compliance with IV.D.1 as required by 40 CFR 264.17(c) and place this documentation in the operating record (condition II.K.1).

3. The Permittee shall maintain buffer zones around covered tanks as specified in Attachment 8, as required by 40 CFR 264.198(b).

E. Special Requirements for Incompatible Wastes.

1. The Permittee shall not place incompatible wastes in the same tank or place hazardous waste in a tank that previously held an incompatible waste or material unless the procedures specified in Attachment 8 are followed, as required by 40 CFR 264.17(b).

2. The Permittee shall document compliance with IV.E.1 as required by 40 CFR 264.17(c) and place this documentation in the operating record (condition II.K.1).

F. Compliance Schedule.

Before hazardous waste may be stored in the incinerator feed tank, the Permittee shall install an overflow return line to comply with 40 CFR 264.192(b) and a separate storage tank and feed line to the incinerator for Type Is hazardous waste. Pursuant to the certification requirement of I.D.11, the storage of hazardous wastes in the incinerator feed tank shall not be permitted if the overflow return line and feed modifications are not installed.

V. INCINERATION

A. Construction. The Permittee shall construct and maintain the incinerator in accordance with the attached plans and specifications, Attachment 8. The Permittee shall not feed hazardous waste to the incinerator until Conditions I.D.11 and IV.F, and V.E have been complied with.

B. Performance Standard. The Permittee shall construct and maintain the incinerator so that, when operated in accordance with the operating requirements, specified in this permit, it will meet the following performance standards.

1. The incinerator must achieve a destruction and removal efficiency (DRE) of 99.99% for each principal organic hazardous constituent (POHC) designated in this permit for each waste feed. DRE shall be determined using the method specified in 40 CFR 264.343(c).

2. The Permittee must control hydrogen chloride (HCl) emissions, such that the rate of emissions is no greater than the larger of either 1.8 Kg/hr or 1% of the HCl in the stack gas prior to entering any pollution control equipment.

3. The incinerator must not emit particulate matter in excess of 180 milligrams per dry standard cubic meter when corrected for the amount of oxygen in the stack gas in accordance with the formula specified in 40 CFR 264.343(c).

4. Compliance with the operating conditions specified in this permit will be regarded as compliance with the above performance standards. However, evidence that compliance with such permit conditions is insufficient to ensure compliance with the above performance standards may be "information" justifying modification, revocation or reissuance of the permit pursuant to 40 CFR 270.41.

C. Limitation On Wastes: Except during the periods specified in conditions VI.A and B, the Permittee shall incinerate the following hazardous wastes only as allowed by the terms of this permit:

- The POHC shall be carbon tetrachloride.
- The Permittee shall not incinerate any hazardous waste having a heat of combustion less than 0.24 Kcal/gm, (carbon tetrachloride).
- The ash content of the waste shall be no greater than 1.7 %

- The physical form of the waste shall be liquid having a viscosity not exceeding 11.1 cps at 25° C.
- No waste or combination of waste, as fed to the incinerator shall have a heating valve of less than 590,000 Btu/hr. This corresponds to a minimum heating value of 6,552 Btu/lb in the hazardous waste at a minimum feed rate of 13.0 gallons/hr. The hazardous waste feed rate shall never exceed 15.0 ± 15% gallons/hr.

D. Operating Conditions: Except during the periods specified in conditions VI.A and B, the Permittee shall feed Type I and Type II wastes described in condition V.C to the incinerator only under the following operating conditions:

1. Combustion temperature, measured as specified in condition V.D.7 shall be maintained between 1700°F and 2300°F.

2. Combustion gas velocity, measured as specified in Condition V.D.7, shall be no greater than 2850 ft/min (actual).

3. Stack gas concentration of carbon monoxide, measured as specified in condition V.D.7, shall not exceed 100 ppm.

4. During start-up and shut-down of the incinerator, Type I and II hazardous waste shall not be introduced into the incinerator. Type Is hazardous waste may be used for start-up.

5. The Permittee shall control fugitive emissions from the combustion zone of the incinerator by maintaining combustion zone pressure lower than atmospheric pressure. A negative pressure of at least 0.10 inches of water must be maintained during operation.

6. The Permittee shall construct, maintain and calibrate the system specified below to automatically cut off Type I and II hazardous waste feed to the incinerator at the levels specified below when the operating conditions deviate from the limits established herein.

	System	Cut Off Limits	Calibration Frequency	Test Frequency
a.	Pump inlet pressure	> 20 in Hg vacuum	annually	monthly
b.	Pump outlet pressure	> 50 psi	annually	monthly

	System	Cut Off Limits	Calibration Frequency	Test Frequency
c.	Air pressure switch	< 50 psi	annually	weekly
d.	Main chamber temperature	< 1300°F > 1600°F	annually	daily
e.	Secondary chamber temperature	< 1700°F > 2300°F	annually	daily
f.	Waste feed rate	> 15.0 ± 15% gallons/hr	annually	weekly
g.	Combustion gas velocity	> 2850 ft/min (actual)	annually	weekly
h.	Carbon monoxide	> 100 ppm	daily	daily

7. The Permittee shall monitor the facility as specified below:

	System	Purpose	Frequency of Monitoring
a.	Carbon Monoxide concentration exceeds 100 ppm	shut-down if stack exceeds 100 ppm	continuous
b.	Secondary Chamber Temperature	maintain 1700-2300°F range	continuous
c.	Main Chamber Temperature	maintain 1300-1600°F range	continuous
d.	Waste feed rate	should not exceed 15.0 ± 15% gallons per hour	continuous
e.	Combustion gas velocity	should not be greater than 2800 ft/min (actual)	continuous

System	Purpose	Frequency of Monitoring
f. Manual override switch	check position must be in "Hazardous" position except when Type Is waste is being burned	daily

8. Upon request of the Regional Administrator, the Permittee shall perform the tests required by 40 CFR 264.347(a)(3).

9. The Permittee shall record and maintain the monitoring and inspection data as required by 40 CFR 264.347(d).

10. The Permittee must cease feeding waste when changes in waste feed or operating conditions exceed limits designated in this permit.

11. Type Is hazardous waste is defined as Type I hazardous waste in which the absence of 40 CFR 261 Appendix VIII hazardous constituents has been verified by chemical analysis.

E. Compliance Schedule: Within 45 days from the date of issuance of this permit, the Permittee must revise the incinerator's control system such that waste feed cut-off will occur automatically whenever any operating condition specified in Condition V.D.6 deviates from the specified level. The Permittee shall also install 1) a carbon monoxide monitor system and alarm to satisfy the requirements of 40 CFR 264.347 and, 2) a device to indirectly monitor combustion gas velocity to comply with 40 CFR 264.345(b)(4). Pursuant to the certification requirement of I.D.11, the incineration of any hazardous waste shall not occur if these activities have not been completed.

VI. INCINERATOR SHAKEDOWN PERIOD

A. Shakedown Period. During the shakedown period (the period beginning with the initial introduction of Type I hazardous wastes into the incinerator), the Permittee shall comply with the following conditions:

1. Duration of Shakedown Period. The shakedown period shall not exceed 720 hours of operation when burning hazardous wastes. The Permittee may petition the Regional Administrator for one extension of the shakedown period for up to 720 additional hours. The Regional Administrator may grant the extension when good cause is demonstrated in the petition in accordance with 40 CFR 264.344(c)(1)

2. Waste Feed Identification. During the shakedown period the Permittee may feed the following wastes at the facility, subject to the requirements of condition VI.A.3. The Permittee may incinerate only hazardous wastes which have been classified as Type I and Type Is. These wastes have met the exemption criteria under 40 CFR 264.340(b)(1) and (2). As described in Attachment 1, a portion of the Type I wastes shall be sampled and analyzed for 40 CFR 261 Appendix VIII hazardous waste constituents which might reasonably be expected to be present in the waste. If these constituents are found to be absent in the Type I waste, it will be reclassified as Type Is hazardous waste. Type Is hazardous waste shall be utilized as a start-up fuel for the incinerator. During the shakedown period, Type II hazardous waste shall not be incinerated. Type I hazardous wastes shall not be introduced into the incinerator during start-up and shutdown.

3. Operating Conditions. Incinerator shakedown shall not begin until the requirements of Condition V.A have been met. Operating conditions V.D.1, 2, and 3 shall be met during the shakedown period. The Permittee shall monitor the facility during the shakedown period as described in V.D.7, and follow the procedures described in the Waste Analysis Plan, Attachment 1.

   a. Upon request of the Regional Administrator, the Permittee shall perform the test required by 40 CFR 264.347(a)(3).

   b. The Permittee shall record and maintain monitoring and inspection data as required by 40 CFR 264.347(d).

c. Except where otherwise stated, all conditions of Sections I, II, III, and IV of this permit must be followed during the shakedown period.

d. The Permittee must cease operation when changes in waste feed or operating conditions exceed limits designated in this permit.

B. Compliance Schedule. During the shakedown period, the Permittee shall construct calibration charts of the induced draft fan or other flow monitoring equipment. These charts will relate pressure drop, temperature, fan amperage, or other flow monitoring equipment parameters to combustion gas velocity or volumetric flow rate, and to combustion zone pressure. The Permittee must also develop calibration charts relating waste feed rate in gallons/hr for the flow meter installed on the incinerator to comply with 40 CFR 264.345(b)(2) and conditions I.G and V.C of this permit. These charts shall be submitted following completion of the shakedown period, but before the burning of Type II hazardous wastes will be permitted in accordance with condition I.G. In accordance with the certification requirement of I.D.11, a letter of certification stating that the shakedown period has been successfully completed, signed by an independent registered professional engineer, must be received by U.S. EPA before burning of Type II hazardous waste will be permitted.

ATTACHMENT 1

WASTE ANALYSIS

ATTACHMENT 1 WASTE ANALYSIS

C-1 Waste Analysis

Our inventory currently consists of 3 main types of waste and one sub type.

Type 1 is waste which is hazardous solely because of ignitability and contains no hazardous constituents as listed in CFR 40 Part 261 Appendix VIII. (This list is also found in Wis. DNR's NR 181.16 Table VI) The basis for this designation is that the flash point of this is below 140°F which puts this into the ignitable (D001) category. This material will be incinerated under the conditions as set forth in this permit, based on run #4 of the trial burn data.

Type 1s, a subtype, is a portion of type 1 waste which will be used as start up material for the incinerator. A composite sample will be taken from specifically segregated drums and checked for the presence of any Appendix VIII constituents which could reasonably be expected to be present. Once it has been verified that there are none or less than 100 PPM of any of the Appendix VIII constituents, it will be kept separate and used for the start of the incinerator. If any Appendix VIII constituents are found in concentrations higher than 100 PPM, the drums of waste represented by the composite sample will be incinerated under the conditions set forth in this permit based on run #4 of the trial burn data. Both type 1 and type 1s qualify for the exemption listed in 264.340 (b)(1)(i). See following comment.

Type 2 is waste thinner which is being stored prior to shipment for reclamation. Type 2 may also consist of still bottoms from the recovery of the waste thinner. The basis for the hazardous designation is that this waste usually contains hazardous constituents listed in Appendix VIII (Toluene, Methyl Ethyl Ketone, Isobutyl Alcohol, or Benzene) which would put this into the F005 category. It also has a flash point of less than 140°F which puts it into the ignitable (D001) category. The still bottoms will be incinerated under the conditions set forth in this permit based on run #4 of the trial burn data.

Type 3 is waste which consists solely of chlorinated solvents that are being stored prior to shipment for reclaiming. It is shipped to Acme Solvent Reclaimers where it is reclaimed for resale purposes.The basis for the hazardous designation is that this waste contains hazardous constituents as listed in Appendix VIII (Trichlorethylene, Tetrachloroethylene, Dichloromethane, or 111 Trichlorethylene) which would put this into the F001 category. Type 3 will never be incinerated.

C-1e (2) Incinerators - Data in Lieu of Trial Burn

In the comparison between waste we intend to burn and the data submitted in lieu of trial burn, it is shown that the waste used in the trial burn was more difficult to incinerate. The heating value of the waste used in the trial burn run #4 was 6552 BTU/lb. The heating value of the waste we intend to burn exceeds this value. The hazardous constituents of the trial burn waste include the spiking materials of Carbon Tetrachloride, Trichlorethylene, and Chlorobenzene. Based on the heat of combustion hierarchy, these are all more difficult to burn than the Toluene and Methyl Ethyl Ketone found in the waste we intend to burn. The waste in run #4 of the trial burn includes .87% chlorine. The chlorine content of the material we intend to burn is .31% The ash content of the trial burn waste was 1.47%. The average ash content of the waste we intend to burn is 1.38%.

By using the data from the previous trial burn, we are in essence using an artificial waste feed which is more difficult to burn than the waste we intend to burn. As stated in the "Guidance Manual for Hazardous Waste Incinerator Permits", page 2-40 paragraph 3, "Using an artificial waste stream has the advantage of simplifying the analytical procedures because interference by organics other than POHC's is greatly reduced. This approach also allows the applicant to create a waste feed that is very difficult to burn. A successful trial burn conducted with such a waste feed results in permit conditions allowing the operator to accept a wide variety of wastes for treatment, perhaps eliminating any future need for permit modifications and additional trial burns".

Based on the data from the trial burn and the analysis of our waste, we recommend the following be designated as POHCs: Carbon Tetrachloride, Trichlorethylene, and Chlorobenzene because of their lower heat of combustion values, and Toluene and Methyl Ethyl Ketone because of their quantities in our waste. As stated in the "Guidance Manual for Hazardous Waste Incinerator Permits:, page 2-39 paragraph 3, "Spiking the waste with less incinerable hazardous constituents provides the advantage of increasing the number of hazardous constituents that can be allowed by the permit. The permit writer should assume that if an incinerator can achieve a 99.99% DRE of a hazardous constituent, then it is also capable of achieving a 99.99% DRE of more easily incinerated constituents, if the same operating conditions are maintained. For example, if the applicant spikes the waste with chloroform or tribromomethane and 99.99% DRE is achieved, the permit may be written to allow burning of nearly all of the Appendix VIII hazardous constituents".

C-2 Waste Analysis Plan (answering C-2a,b,c,d, and e.)

Appendix 12 is a copy of our waste analysis plan which includes a copy of a "Sample Waste Profile Report". Within this plan and profile report are the parameter and rationale for the analysis and the test methods used to accomplish the analysis. The frequency and procedures used to inspect incoming shipments from off-site have also been incorporated into the plan. All sampling is done in accordance with the methods as described in CFR 40 Part 261 Appendix 1. Also Wis. DNR's NR 181 Appendix I.

WASTE ANALYSIS PLAN

Commerce accepts waste from those generators who have become our customers by purchasing our raw materials. Our sales force gains first hand knowledge of the waste generation process before any waste is considered. It is by this method that we fortify the rationale of materials being reasonably expected to be present in a waste. That is because we are familiar with the generator's operations and with the materials which could be found within the generator's plant.

1. Sample Identification

A sample of waste is received along with a completed "Waste Sample Profile Report". This sample is given a lab number which is the same as the date on which it was received. If more than one sample is received on a particular day, an alphabetic character follows the lab number. All samples are taken in accordance with CFR 40 part 261 Appendix I (EPA 600/2 80-018, Jan 1980). Also Wis. DNR's NR 181 Appendix I.

The generator may send a composite sample for analysis. However, if a problem is found with the composite sample, each drum will be sampled individually to determine within which drum the problem exists.

2. Initial Determination of Waste Type

Based on the waste profile report submitted by the generator, an initial determination is made as to how the waste will be typed, should we decide to accept it. Four specific areas of the waste profile report are instrumental in making this decision. These areas are: " What is the name of the waste", "By what process is it generated", "Does the waste contain any...", and "Does this waste contain any EPA hazardous substances according to the Clean Water Act". These four areas form the basis and the rational for our determining the waste types.

To clarify this, we will look at each area individually:

What is the name of the waste? If the waste name is that of a listed Appendix VIII constituent, (or NR 181 Table VI) such as Toluene or 111 Trichloroethane, the waste is placed into type 2 or type 3 respectively. However, if the waste is named by characteristic such as Combustible Liquid NOS or Flammable Liquid NOS, it is placed into type 1 and we go on to the next question.

By what process is it generated? If the process listed shows that the material does come in contact with any Appendix VIII constituents, the waste is placed into type 2 or type 3, depending upon what those constituents are. However, if the process listed is one where the waste does not come in contact with Appendix VIII constituents, for example, Mineral Spirits which is used to clean oil or grease from metal parts, then none of the Appendix VIII constituents would reasonably be expected in the waste. Again, it is placed into type 1 and we go on to the next question.

Does the waste contain any...? If the section for halogens is the only one which is marked "yes", the waste is placed into our type 3. If any other section is marked "yes", we reject the waste and alert the generator that he will have to find alternate means by which to dispose of his waste. However, if all sections are marked "no", it is placed into type 1 and we go on to the next question.

Does the waste contain any EPA hazardous substances according to the Clean Water Act? If the answer is "yes" and the materials listed are Appendix VIII constituents, the waste is placed into type 2 or type 3, depending upon the constituent. If the section is marked "yes", and the materials listed are not Appendix VIII constituents, or if this section is marked "no", it is placed into type 1.

We now have our 3 initial waste types. Type 1 being waste which is hazardous due to its characteristic of ignitability, but which should show no amounts of Appendix VIII constituents. Type 2 being waste which we know contains some Appendix VIII constituents but none which are chlorinated. Type 3 being waste which we know contains Appendix VIII constituents which are chlorinated.

3. Final Determination of Waste Type Through Analysis

To verify the information submitted by the generator on the waste profile report, all samples will be analyzed for the organic compounds of Appendix VIII which are reasonably expected to be present.

Based on the nature of the businesses we service, the personal contact and knowledge we have of these businesses, and based on our records of their purchases, these constituents are: Dichloromethane, Tetrachloroethylene, Trichlorethylene, 111 Trichlorethane, Benzene, Isobutyl Alcohol, Methyl Ethyl Ketone, and Toluene.

Although all of type 1 qualifies for the exemption listed in CFR 40 264.340 (b)(1)(i), a portion will be tested for any Appendix VIII constituents which could reasonably be expected to be present. (These are listed above) Commerce will determine this experimentally using the procedure described in CFR 40 261.21 whether waste classified as Type 1, D001, meets the exemption criteria. A flash point determination on a representative composite of all drums in each shipment of Type 1 will be conducted. Once it has been determined that there are no Appendix VIII constituents present above the 100 PPM level, this portion will then be called type 1s and will be used as start up material for the incinerator. This will allow us to bring the incinerator to the temperatures required in this permit to burn type 2 waste. (That is based on run #4 of the trial burn data) If it does not meet the exemption criteria, it will be reclassified as Type 2.

If the analysis shows that the sample contains Benzene, Isobutyl Alcohol, Methyl Ethyl Ketone, or Toluene, it is placed in type 2. If this type 2 sample shows sufficient recovery value, the waste will be stored for future reclamation. If not, the waste will be incinerated under the conditions set forth in this permit based on run #4 of the trial burn data.

If the analysis shows the sample contains Dichloromethane, Tetrachloroethylene, Trichlorethylene, or 111 Trichlorethane, it is placed in type 3. If the sample shows sufficient recovery value, the waste will be stored for future reclamation. If not, the sample is rejected and the generator is alerted that he will have to find alternate means by which to dispose of this waste.

If the analysis shows that the sample is a type 1 or type 2 which has some of the chlorinated constituents of type 3 mixed in, the sample is rejected due to lack of incinerability under permit conditions and due to poor recovery value. The generator is then informed that we will not accept his waste and that he will have to use an alternate means of disposal.

The tests described above for Appendix VIII constituents which could reasonably be present in the waste will be performed on a representative composite of all drums of each presumed waste type in each shipment of hazardous waste from the same source. If analytical tests do not verify the initial determination, individual samples will then be required for analysis. Only those drums which meet our criteria will be picked up.

Prior to incineration, 10% of all type 1 waste will be analyzed for viscosity, ash content, chlorine content, and higher heating value, using methods established by ASTM and/or US EPA (e. ASTM-D-240-76, ASTM-D-808-81, ASTM-D-482-80, or SW-846). 20% of type 2 waste will be analyzed for the parameters described above, using the referenced test procedures.

Trichloromonofluoromethane, Tribromomethane, and Dichlorodifluoromethane are not reasonably expected to be found in the waste we receive. However, they do rate higher on the "Ranking of Incinerability of Organic Hazardous Constituents from Appendix VIII part 261 on the Heat of Combustion" than Tetrachloromethane (Carbon Tetrachloride) which is the highest ranking POHC allowed by this permit. (This is based on the results of run #4 of the trial burn data where a 99.99% DRE was achieved on the Tetrachloromethane). Therefore, we will, on a spot basis, check for these materials at a frequency of approximately 1 in every 20 samples received. If any of these three constituents is found at levels over 100 PPM, the sample will be rejected and the generator will be alerted that he will have to find alternate means by which to dispose of this waste. Should these materials be detected in a sample, all of that particular generator's samples will be subsequently checked for them.

4. Method of Analysis

All samples will be analyzed by the methods listed in EPA SW 846 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods", ASTM-D240-76, ASTM-D808-81, or ASTM-D482-80. To do this we will be using a Perkin Elmer Sigma 3 gas chromatograph equipped with flame ionization detector, Sigma 10 Data Station, electron capture detector add on, and a purge and trap liquid sample concentrator. The columns and accompanying apparatus used will be those specified in SW 846 for the particular constituents. All procedures, sampling and handling, and quality control will be performed according to SW 846.

5. Waste Verification

When the waste itself is picked up, it is taken to a reception section of the hazardous waste storage area until the initial determination can be performed. Once this has been conducted, the waste is assigned a spot in the storage area according to its type.

The tests described above for Appendix VIII compounds which could reasonably be present in the waste will be performed on a representative composite of all drums of each presumed waste type in each shipment of hazardous waste from the same source. If analytical tests do not verify the initial determination, the the drums will be checked individually. Those drums not matching the original sample will be returned to the generator.

6. Record Keeping

Once the waste has been accepted and verified, the appropriate copies of the manifest are put together with the chromatograms, lab reports, and waste sample profile report. They are filed, by generator, and kept in the operating record for a minimum of 3 years. The manifest number is recorded on the retain waste sample and this sample is kept for 3 years.

An operating log indicating the date of shipment and quantity of drums of each type will be maintained. The operating log will also indicate the dates of incineration, or shipment to another TSD facility. A running balance of each type of waste stored in the containment area will be maintained. The log will also indicate the dates of analytical verification, and whether manifest discrepancies existed.

7. Analysis of Ash

Any ash resulting from the incineration of a CFR 40 261 Subpart D hazardous waste will be treated as a hazardous waste. It will be properly labelled and stored in the hazardous waste storage area until a drum has been collected. The entire drum will be then sent offsite for disposal. Any ash resulting from the incineration of a Subpart C hazardous waste will be segregated from ash generated from Subpart D waste and handled as a hazardous waste until the provisions of CFR 40 261.3 (d)(1) have been addressed.

ATTACHMENT 2

INSPECTION RECORDS

AREA/EQUIPMENT	SPECIFIC ITEM	TYPES OF PROBLEMS	FREQUENCY
Personal Equipment	Boots, gloves masks, goggles	Check for holes or leaks in boots and gloves, and in the packages of the masks. Clean goggles.	Monthly or after each use.
Incinerator	Waste feed rate	Should be below 15.0 ± 15% gallons per hour	Weekly
	Manual override switch	Should be in Type Is position during startup.	Daily
	Injector Nozzle	Check for plugging	Weekly
Waste Feed Cutoffs	Carbon Monoxide monitor & Cutoff	Check operability	Daily*
	Combustion gas vel.	Should not be greater than 2850 ft/min- (actual)	Weekly
	Pump inlet pressure	Should not be less than 20 in Hg vacuum	Monthly
	Pump outlet pressure	Should not be greater than 50 psi	Monthly
	Air pressure switch	Should not be less than 50 psi	Weekly
	Main chamber temp.	Should be between 1300°F and 1700°F	Daily*
	Sec. chamber temp.	Should be between 1700°F and 2300°F	Daily*
Reservoir	Waste level before filling	Should be empty	Daily*
	Waste level at end of day	Should be below feed pipe	Daily*
	Overflow return line	Check operability	Daily*
	Manual override valve	Check for proper position for waste being burned	Daily*
	Construction and surrounding area	Check for leaks, spills, evidence of possible leaks	Weekly
	Reservoir	Check for corrosion and erosion	Yearly

* Daily meaning those days on which the incinerator is actually operated.

DAILY INSPECTION LOG FOR INCINERATOR, MONITORING EQUIPMENT, AND RESERVOIR

Inspector's Name_____
Title_____
Date_____
Time_____

Visually check these areas for spills, leaks, plugging, or tampering

	OK	Problem
Pipes/Hoses	_____	_____
Pumps	_____	_____
Valves	_____	_____
Reservoir	_____	_____
Strainer Basket	_____	_____
Control Settings	_____	_____
Overflow recycle/return line	_____	_____

Before operation, check the following:

Operability of CO cutoff	_____	_____
Main chamber temperature cutoff	_____	_____
Secondary chamber temperature cutoff	_____	_____
Level of waste prior to filling should be empty.	_____	_____
Manual override switch should be on type ls	_____	_____

During operation, check monitoring equipment to be sure it is functioning within the correct limits:

EQUIPMENT	SHOULD BE	ACTUAL READING
CO Monitor	Below 100 PPM	_____
Main Chamber Temperature	Between 1300-1600°F	_____
Secondary Chamber Temperature	Between 1700-2000°F	_____
Waste Feed Rate	Below 17½ gal/hr	_____
Combustion gas velocity	Below 2850 ft/min (actual)	_____

On the back side of this form, list any problems and remedial action taken. Also list any automatic cutoffs which occurred and the remedial action needed to resume operation. (Any problems must be corrected before starting or resuming operation of the incinerator)

If incinerator was not operated this day, date the log and indicate so here

(X)_____.

INSPECTION SCHEDULE

AREA/EQUIPMENT	SPECIFIC ITEM	TYPES OF PROBLEMS	FREQUENCY
Container Storage	Container placement	Check for aisle space and height of stacks.	Weekly
	Sealing of drums	Check for open drums and leakers.	Weekly
	Drum labels	Check for missing labels or missing information on labels. Check for improper labels.	Weekly
	Pallets	Check for broken or damaged boards.	Weekly
	Floor, dike, ramp, and sump	Check for cracks, deterioration or leaks.	Weekly
	Divider chain	Check for proper placement.	Weekly
Inventory	Drums	Check current total-should match running balance in operating log.	Weekly
Emergency Equipment	Floor absorbent	Check stock and placement of floor absorbent.	Monthly
	Pump & steam cleaner	Check operability	Monthly
	Fire extinguisher	Check placement Check recharging (done by outside service)	Monthly Yearly
	Overpack drums	Make sure two are always available.	Monthly
	Telephone	Check to make sure it's in working order.	Daily
	Fire alarm	Check for malfunctions.	Set nightly
Security Devices	Doors, fence,	Check for leaks or signs of deterioration. Check Check for damage or corrosion to links or locks.	Monthly
	Internal alarm	Check for operability.	Monthly
	Sprinkler system	Check for operability.	Yearly
	Warning signs	Check for proper placement.	Weekly

WEEKLY INSPECTION LOG

Inspector's Name_____
Title_____
Date_____
Time_____

ITEM	TYPE OF PROBLEMS	STATUS OK	STATUS NOT OK	REMARKS DATE AND NATURE OF REPAIR OR ACTION
Container placement	Aisle space, height of stack			
Seals of drums	Open lids, leakers			
Drum labels	Missing or improper labels			
Pallets	Broken or damaged boards			
Floor, dike, ramp, sump	Cracks, deterioration, or leaks			
Inventory	Discrepancies in count			Actual count:
Chain between types of waste	Check for proper placement			
Construction integrity and area surrounding tank	Check for leaks, spills, or evidence of possible leaks			
Warning signs	Check for proper placement			
Injector Nozzle	Check for plugging			

Test the following cutoff systems of the incinerator:

Air pressure switch	Should not be less than 50 psi			
Waste feed rate	Should not exceed 17.2 gal/hr.			
Combustion gas velocity	Should not exceed 2850 ft/min. (actual)			

If any of the above cutoffs is not operating properly, do not run the incinerator. List specific problem on the back of this form along with the remedial action taken.

MONTHLY INSPECTION LOG

Inspector_____
Title_____
Date_____
Time_____

ITEM	TYPE OF PROBLEMS	STATUS OK	STATUS NOT OK	REMARKS DATE AND NATURE OF REPAIR OR ACTION
Floor absorbent	Stock level			
Fire extinguisher 1	In its proper location			
Fire extinguisher 2	In its proper location			
Protective clothing	Holes, wear and tear			
Security devices	Damage to fence or lock			
Organic respirators	Check for damage			
Overpack drums	Check availability			
Steam cleaning unit	Check operability			
Manual transfer pump	Check operability			

Test the following cutoff systems of the incinerator:

Pump inlet pressure	Should not be less than 20 in Hg vacuum			
Pump outlet pressure	Should not be greater than 50 psi			

If either of the above cutoffs is not operating properly, do not run the incinerator. List specific problem on the back of this form along with the remedial action taken.

YEARLY INSPECTION LOG

Inspector_____
Title_____
Date_____
Time_____

In June of each year, check the following:

ITEM	WHAT TO CHECK	STATUS		REMARKS
		OK	NOT OK	DATE & NATURE OF REPAIR OR ACTION
Fire extinguishers	Make sure the service company recharges them.			
Sprinkler system	Make sure the service company checks operability			
Reservoir	Check for corrosion/erosion			

Attachment 3

PERSONNEL TRAINING

H-1a Job Titles

Appendix 23 is an overview of the organization of the organization of the hazardous waste program of Commerce Industrial Chemicals, Inc..

Appendix 24 is a list of job titles and the names of the persons who fill these positions.

H-1b Content

Each Commerce Industrial Chemicals, Inc. employee initially attends a hazardous materials and waste management training/compliance seminar. This seminar, which is currently being given by the Transportation Skills Program, is a comprehensive and extensive overview to current, new, and proposed regulations of the EPA, DOT, and OSHA, for handling of hazardous material, substances, and wastes.

Persons directly involved with the handling of hazardous wastes and materials are initially given a test to determine the extent of their knowledge of safe procedures and regulations. Areas of incorrect answers are then reviewed with the employee to ensure safe handling of the materials and compliance with the regulations. Each employee has access to a semi-annually updated copy of CFR 40 and CFR 49. They also have access to an annually updated copy of Hazardous Materials, Substances, and Waste Compliance Guide, which references CFR 40 parts 117 and 260-265. Also CFR 49 parts 171 and 172. This is an extremely comprehensive text, yet written in laymen's terms for easy understanding and compliance. Appendix 25 lists the table of contents for these publications.

Emergency coordinators all take part in formulating the contingency plan. A meeting is held every six months, or after the plan has been put to use, whichever is first, to evaluate the plan's performance and to make any necessary changes. Drills on the contingency plan are held to familiarize all personnel at the facility with the plan. Persons involved with any emergency equipment are trained in the use of that equipment.

Persons operating the incinerator will receive training from the Paul Reilly Company, the authorized sales and service representative for the incinerator manufacturer, the Kelley Company. This will be done during the shakedown period in which only type 1 (exempted waste) will be burned. The training will include acquaintance with incineration process. Proper operation and maintenance of the unit. Purpose and use of security and communication systems. Monitoring requirements for tracking and recording the operation of the unit. How to test waste feed cut off systems. How to inspect incinerator. Use of type 1s waste. Servicing of unit. Emergency response. This training will continue until the seller and the manufacturer of the incinerator feel that the operator(s) is competent in all aspects of its operation. After training and shakedown periods have been completed, an independent registered PE will be contacted to give certification that the incinerator is being operated correctly.

Persons conducting inspections are trained to know the areas to be inspected and to understand the possible problems that can occur in those areas. Inspection logs are provided for the inspector to complete.

H-1c Trainer Qualification

Persons involved in training are the Head of the Waste Program, the Technical Director, and the Environmental Operations Manager. They have annually attended the Hazardous Materials, Substances, and Waste Management Training and Compliance seminar given by the Transportation Skills Program. Two have attended programs on "Industrial Solid and Hazardous Waste Incineration" and "Hazardous Waste Management Practices" conducted by the University of Wisconsin Extension, Department of Engineering and Applied Science. This along with many years of practical experience in the actual handling of hazardous materials and wastes provides a good basis for these trainers to implement training of others. The trainers will maintain their skill by continuing to attend classes or seminars which are relevant to hazardous waste management.

H-1d Relevance of Training

Persons involved directly with the handling of waste are given broad instruction in that area and limited instruction in the administrative area. Office personnel have limited instruction in all areas except their actions as instructed in the contingency plan. Appendix 26 is a chart which shows the relevance of training to a particular job.

H-1e Emergency Response

All personnel are instructed in their response to the contingency plan. Personnel directly involved with the handling of the waste are trained to respond properly to emergency situations such as fire, explosion or spill.

H-2 Implementation

All personnel are currently trained in their respective areas. Upon receipt of the final permit, another session will be held with all personnel involved to ensure compliance with every aspect of that permit. Sessions will be held annually to maintain personnel skills. All areas of hazardous waste handling, storage, and treatment will be reviewed, noting any problems or changes which had occurred during the past year. Problem areas will be identified and discussed in order to form effective solutions. The contingency plan will be reviewed, noting any incidents which warranted the use of the plan and/or emergency action. We will focus on the cause of the incident and create steps which can be taken to prevent further incidents and insure better handling of such events in the future.

Records of training are kept in the operating record until closure for current employees and for 3 years from the date of an individual employee's termination for former employees.

1982/83 HAZARDOUS MATERIALS/
WASTE COMPLIANCE GUIDE

Table of Contents

HAZARDOUS WASTE MANAGEMENT

PART 264
STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE & DISPOSAL FACILITIES

Subpart A — General

Subpart B — General Facility Standards

Subpart C — Preparedness and Prevention

HAZARDOUS WASTE MANAGEMENT GUIDE

Subpart D — Contingency Plan and Emergency Procedures

Subpart E — Manifest System, Recordkeeping, and Reporting

HAZARDOUS WASTE MANAGEMENT GUIDE

Subpart G — Closure and Post-Closure

Subpart H — Financial Requirements

Subpart I — Use and Management of Containers

HAZARDOUS WASTE MANAGEMENT GUIDE

Subpart J — Tanks

SUBPART O - INCINERATORS

RELEVANCE OF TRAINING

JOB TITLE	PERSONAL SAFETY	RELEASE PREVENTION AND RESPONSE	CONTINGENCY PLAN	EMERGENCY PROCEDURES	HAZ. WASTE MGT. PRACTICES	RECORD KEEPING	WASTE HANDLING
Head of Program	B	B	B	B	B	B	B
Emer. Coordinators	B	B	B	B	B	L	B
Env. Operation Mgr.	B	B	B	B	B	L	B
Technical Director	B	B	B	B	B	B	B
Lab Chemist	B	B	B	B	B	B	B
Warehouse men	B	B	L	L	L	L	B
Drivers	B	B	L	L	L	L	B
Office Personnel	L	L	L	L	L	L	L

B= Broad Instruction

L= Limited Instruction

ATTACHMENT 4

CONTINGENCY PLAN

CONTINGENCY PLAN

OF

COMMERCE INDUSTRIAL CHEMICALS, INC.
5611 W. WOOLWORTH AVE.
MILWAUKEE, WI 53218

OWNER/OPERATOR

DONALD J. MICHALSKI
7033 W. WELLS ST.
WAUWATOSA, WI 53213

414 774-8580

Appendix 19

Our inventory currently consists of 3 types of wastes.

Type 1 is waste which is hazardous solely because of ignitability and contains no hazardous constituents as listed in CFR 40 part 261 Appendix VIII. (This list is also found in Wis. DNR's NR 181.16 Table VI) The basis for the hazardous designation is that the flash point of this material is below 140°F which puts this into the ignitable, (D001) category.

Type 2 is waste thinner which is being stored prior to shipment for reclaiming. Type 2 may also consist of still bottoms from the recovery of the waste thinner. The basis for the hazardous designation is that this waste usually contains a hazardous constituent as listed in CFR 40 part 261 Appendix VIII which would put this into the F005 category. It also has a flash point of less than 140°F which puts it into the ignitable (D001) category.

Type 3 is waste which consists of chlorinated solvents that are being stored prior to shipment for reclaiming. The basis for the hazardous designation is that this waste contains hazardous constituents as listed in CFR 40 part 261 Appendix VIII which would put this into the F001 category.

These are the primary and alternate emergency coordinators.

Name	Address	Work	Home
Ronald Nellis	20149 W. Good Hope Rd. Lannon, WI 53046	353-3630 Beeper	255-4547 226-9093
Donald Michalski	7033 W. Wells St. Wauwatosa, WI 53213	353-3630	774-8580
Fredric Michalski	2524 S. 62nd St. Milwaukee, WI 53219	353-3630	321-0414
Harriet Pedersen	1561 N. 51st St. Milwaukee, WI 53208	353-3630	475-5344
Ralph Harpt	2052 N. 84th St. Wauwatosa, WI 53226	353-3630	476-4078

If Donald Michalski is on site, being the owner/operator, he will immediately assume responsibility of determining whether or not this contingency plan must be implemented. If he is not on site, the highest listed person who is on site will assume this duty.

If necessary this person will then proceed with the actions outlined within this contingency plan.

The procedures described within this contingency plan will be carried out by one of these designated coordinators only.

EMERGENCY EQUIPMENT

The building is equipped with an automatic sprinkler system and alarm bell. This system is connected to Honeywell Protection Services 24 hours/day. Smoke detectors are located throughout the building.

The following is located at the designated "Emergency Equipment Area" which is located at the north end of the warehouse near the office access door.

1. Two open head drums of Oil Dri to absorb spilled material.
2. One shovel.
3. Two pair of protective boots, fire fighter type.
4. Two pair of protective gloves.
5. Two pair of splash proof goggles.
6. Two organic respirators.
7. Two empty openhead drums for the disposal of contaminated Oil Dri.
8. Two over pack drums in the event of severely leaking drums.

Located around the warehouse:

1. One 20 pound ABC type fire extinguisher is located at the northwest corner of the building on the wall inside the west door.
2. One 20 pound ABC type fire extinguisher is located at the entrance to the hazardous waste storage area which is in the east section of the building.

These fire extinguishers are maintained under agreement with the Automatic Fire Protection System Corp. 3265 N. 126th St. Brookfield, WI 53005.

The following equipment is available for emergency use:

1. One manual transfer pump.
2. One portable steam cleaning unit.

EVACUATION PLAN

All persons in the office at the time of an emergency shall leave through the front door.

All persons in the warehouse at the time of an emergency shall leave through any one of the 17 doors located evenly throughout the warehouse.

All persons shall then meet for a head count on 56th street at Mill Rd. It is at this location that the emergency coordinator will wait for local, state, or federal authorities to give any assistance in the control of the emergency.

No one shall return to the building unless authorized by the emergency coordinator or unless the all clear has been given by the emergency coordinator.

A list of employees will be in the operating record to aid the emergency coordinator the head count.

FIRE IN THE GENERAL WAREHOUSE

1. Evacuate all personnel.

2. Notify fire department at 347-2323.

3. Note location of fire so that when the fire department arrives you can help them determine the best plan of attack.

4. If possible, make sure the door to the hazardous waste storage area is closed, shut off electrical system, and shut off the waste feed to the incinerator.

5. If possible, obtain the hazardous waste operating records from the safe and then close the safe.

6. Leave the building and wait at the designated area for the fire department.

7. Take a head count of all personnel.

8. Notify proper authorities if the hazardous waste storage area becomes involved and there is a threat to human health or to the environment.

FIRE IN THE HAZARDOUS WASTE STORAGE AREA

1. Evacuate all personnel.
2. Notify the fire department at 347-2323.
3. If possible, make sure the door to the hazardous waste storage area is closed.
4. If possible, obtain the hazardous waste operating records from the safe and then close the safe.
5. If possible, shut off the electrical system and the waste feed to the incinerator.
6. Leave the building and take a head count of the personnel at the designated meeting area.
7. From another phone, notify the Wis. DNR at 1-608-266-3232 and the National Response Center at 1-800-424-8802.
8. Return to the designated meeting area and wait for the fire department.

SMALL SPILL OF HAZARDOUS WASTE OUTSIDE OF DIKE-INCLUDING INCINERATOR AREA

1. Get Oil Dri from designated emergency area and contain spill. Use protective gloves and boots and breathing apparatus if necessary. Open doors and windows to ventilate area.

2. Remove any source of ignition.

3. Gather contaminated Oil Dri and put into the empty drums provided.

4. Properly label drums and put into the hazardous waste storage area.

5. Clean all equipment used and return it to the designated emergency area.

6. Arrange for disposal of contaminated Oil Dri.

MAJOR SPILL OF HAZARDOUS WASTE OUTSIDE OF DIKE-INCLUDING INCINERATOR AREA

1. If spill reaches sewer, notify sewage treatment plant immediately at 278-3958.

2. Remove any source of ignition. Ventilate area.

3. Attempt to contain spill if possible with Oil Dri using the protective clothing if necessary.

4. Notify Wis. DNR and the National Response Center. Also notify the fire department.

5. If clean up is not possible without help, contact AAA Environmental Services for clean up operation.

6. If necessary, evacuate personnel.

ANY SPILL WITHIN THE DIKE

1. Collect all material at sump area and pump into approved drums.
2. Put drums into storage area.

AFTER THE EMERGENCY

These requirements must be fulfilled.

1. All emergency equipment used must be cleaned and fit for use again.

2. All affected areas must be cleaned before resuming operation.

3. Notify the Wis. DNR and EPA that the facility has been cleaned and is once again in compliance.

4. Note in the operating record the date, time, and details of any incident which required this contingency plan.

5. Within 15 days after the incident, submit a written report to the Wis. DNR and the EPA including:

   a. Name, address, and phone of the owner/operator.
   b. Name, address, and phone of the facility.
   c. Date, time, and type of incident.
   d. Names and quantities of materials involved.
   e. The extent of any injuries.
   f. An assessment of actual or potential hazards to human health or the environment where applicable.
   g. Give the estimated quantity and disposition of any recovered material which resulted from the incident.

INJURY RESULTING FROM FIRE OR SPILL

1. During a fire, move injured person to the designated meeting area.
2. During a spill, move injured person outside to the fresh air.
3. Call the Fire Department at 347-2323.
4. Call St. Michael's Hospital at 263-8175, and alert them as to the nature of the person's injuries and the approximate arrival time.

NOTIFICATION REQUIREMENTS

Fire:	Milwaukee Fire Department	347-2323
Fire of haz. waste	Milwaukee Fire Department	347-2323
	Wis. DNR	1-608-266-3232
	National Response Center	1-800-424-8802
Major spill	Wis. DNR	1-608-266-3232
	National Response Center	1-800-424-8802
	Milwaukee Fire Department	347-2323
If spill reaches sewer	Milw. Sewage Treatment Plant	278-3958
	after hours:	271-2403
If spill reaches navigable waters	U. S. Coast Guard	291-3165
Injury	Fire Department	347-2323
	Paratech Ambulance	464-2020
	St. Michael's Hospital	263-8175

When calling Wis. DNR and National Response Center, have the following information ready:

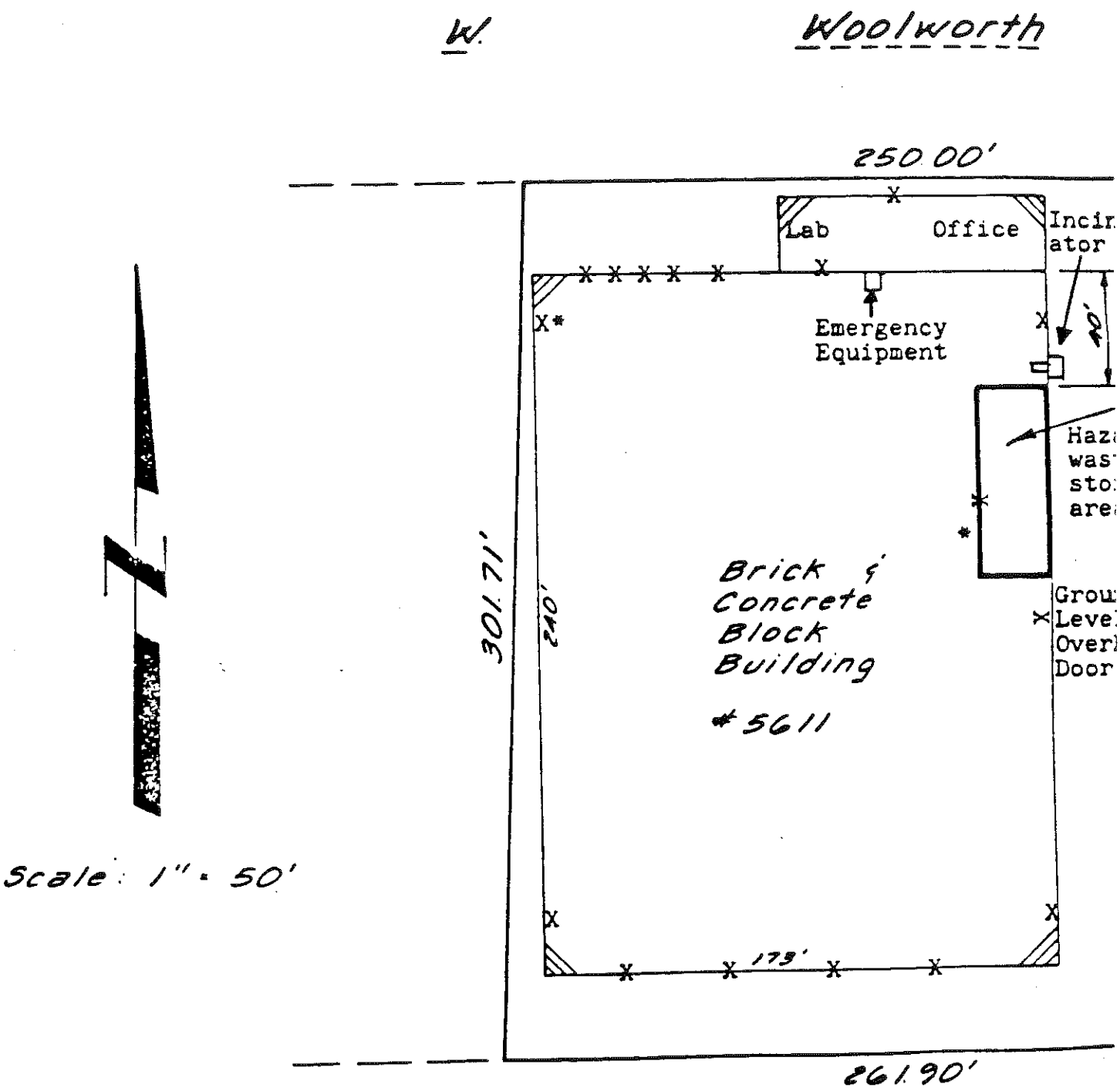
1. Your name and the phone from which you are calling.
2. The company name and address
3. The time and type of incident (fire, spill etc.)
4. Names and quantities of the materials involved to the best of your knowledge.
5. Extent of injuries if any.
6. The possible hazard to human health or the environment outside of the facility.

For help in clean up operations:

AAA Environmental Services 541-1440

KEY

X = Door or exit
* = Fire extinguisher



Scale: 1" = 50'

LOCATION MAP

OVERVIEW OF EMERGENCY RESPONSE

FIRE/EXPLOSION

Call Fire Dept. 347-2323

If possible, contain or extinguish fire

Call Emergency Coordinator

Ronald Nellis 255-4547 or 226-9093 (Beeper)

Donald Michalski 774-8580

Fredric Michalski 321-0414

Harriet Pedersen 475-5344

Ralph Harpt 476-4078

Inform local, state, and federal agencies

Wis. DNR 1-608-266-3232
National Response Center 1-800 424-8802

INJURY

Call Fire Dept. 347-2323
Call ambulance 464-2020

Call St. Michael's Hospital 263-8175

Call Emergency Coordinator

(see list under Fire/Expl.)

SPILL OR MATERIAL RELEASE

If possible, contain spill

Call emergency coordinator (see list under Fire/Explosion)

Inform local, state, and federal agencies (see list under Fire/Explosion)

If spill reaches sewer system

Call treatment plant 278-3958
After hours call 271-2403

If spill reaches navigable water

Call U.S. Coast Guard 291-3165

ATTACHMENT 5

CLOSURE PLAN

I-1a,b,c,d,e,&f Closure Plan

Appendix 27 is a copy of our approved closure plan which covers the information requested in these sections. It lists, in steps, the actions necessary for closure of this facility at the end of its intended operating life. If there are any changes in our operation which would affect the closure plan or cost estimate, an amendment will be made to the plan and submitted to the Regional Administrator and the Wis. DNR for approval and possible permit modification. This plan and any amendments will be kept on file at the facility until the certification of closure completeness has been accepted by the EPA and Wis. DNR, and the certification by an independent registered professional engineer that the facility is closed has been submitted to the EPA and Wis. DNR.

I-3 Notice in Deed and Notice to Local Land Authority

This facility is not a disposal facility therefore, notation is not necessary in the deed informing potential purchasers of restrictions associated with a disposal site as required by CFR 40 part 264.120.

I-4 Closure Cost Estimate

An estimated $9,500.00 (January 1984 cost estimate) will be needed to close this hazardous waste facility. The closure costs are attached to the closure plan in Appendix 27. Costs include removal of waste inventory, decontamination, disposal of wash waters, and closure certification.

These estimates were made as follows:

Removal of inventory The maximum inventory we would have at the time of closure is 396 drums. Disposal cost is based on a quote from Hamilton Industries at Two Rivers, WI of .35¢/gal for incineration of this material. A copy of this quote is attached. Freight costs and labor for the loading of the drums are also listed in this estimate.

Decontamination of storage area and incinerator Once the drums have been removed, the storage area will be steam cleaned, generating an estimated two drums of waste water and residue. Should this waste water be hazardous, it will be included in the final shipment of waste inventory being shipped for disposal. The incinerator pipes, pump, lines, and feeder tank will also be steam cleaned generating an estimated two drums of waste water which, if hazardous, will be included in the final waste inventory being shipped for disposal. Any ash remaining, if hazardous, will be sent for land fill. Labor for these activities has been listed in this estimate.

Closure certification The cost of closure by a professional engineer is estimated on the basis of $30.00/hour at an estimated two hours.

This closure cost estimate will be kept on file and annually, from the date of original development, be revised to reflect changes in closure cost brought about by inflation. The Department of Commerce's Annual Implicit Price Deflator for Gross National Product will be used to make this adjustment. It will also be revised any time a change in the closure plan affects the cost of closure. The Regional Administrator and the Wis. DNR will be notified of any change.

I-5 Financial Assurance Mechanism for Closure

We have established an Irrevocable Letter of Credit through the M&I Marshall & Ilsley Bank in Milwaukee, WI, in the amount of $10,375.00 which is our closure cost estimate adjusted by the Implicit Price Deflator for Gross National Product. The beneficiary is the State of Wisconsin Department of Natural Resources. This letter of credit is valid for one year and will be automatically extended each year unless we are notified 90 days prior to the current expiration date. Appendix 28 is a copy of this Letter of Credit.

I-6 and I-7 Post Closure Cost Estimate and Financial Assurance

Since all wastes will be shipped off site for disposal, there will be no post closure activities or costs.

I-8a Liability Insurance for Sudden Occurrences

Our existing liability insurance policy is currently being amended to include the Hazardous Waste Facility Liability Endorsement as specified in CFR 40 part 264.147. It will include liability coverage for sudden and accidental occurrences in the amount of $1 million per occurrence with an annual aggregate of $2 million exclusive of legal defense costs. Appendix 39 is a copy of our existing policy with the amendment attached.

I-8e Adjustment Procedures

If the Regional Administrator increases the amounts of liability coverage or elects to improve nonsudden liability coverage requirements, we will seek an adjustment to the insurance policy discussed above.

I-9 State Assumption of Responsibility

We will not request state assumption of the legal or financial responsibilities.

1. WASTE MATERIALS. During the term of this Agreement, Generator will provide to Disposer the chemical composition and physical characteristics of which materials are described in the "Generator's Waste Material Profile Sheet", attached hereto, marked Exhibit "A", and incorporated herein.

2. DISPOSER SERVICES. Disposer agrees to provide Generator the disposal of the described waste materials, in a manner permitted by law, at the following facility: Hamilton Industries, 1316 - 18th Street, Two Rivers, Wisconsin 54241.

3. FEES AND BILLING. For those services provided by Disposer, Generator will pay Disposer a fee as follows:

$0.35 per gallon if delivered in 55 gallon drums.

$0.30 per gallon if delivered in bulk.

All materials delivered with freight prepaid to our facility.

CLOSURE PLAN

OF

COMMERCE INDUSTRIAL CHEMICALS, INC.
5611 W. WOOLWORTH AVE.
MILWAUKEE, WI 53218

OWNER/OPERATOR

DONALD J. MICHALSKI
7033 W. WELLS ST.
WAUWATOSA, WI 53213

414 774-8580

Appendix 27

This closure plan addresses all the steps that will be necessary to close this facility at the end of its intended operating life. A post closure plan is not required because this is not a disposal facility and all wastes will be removed at closure. Also, as we do not store waste in tanks, surface impoundments, or landfills, nor do we treat by the process of land treatment, thermal treatment, or chemical, physical, or biological treatment, these items are not addressed in this plan. The feeder tank to the incinerator is addressed in step 3.

This closure plan was designed to ensure that the facility will not require further maintenance and controls. It minimizes or eliminates threats to human health and the environment, and it avoids escape of hazardous waste or hazardous waste constituents. The following sections discuss, in detail, efforts to be made at Commerce Industrial Chemicals, Inc. to satisfy the closure performance standard.

Step 1

Current estimate of closure would be in 15 year from issuance of this permit. We intend to continue storing and treating waste throughout the existence of the corporation, therefore, at the expiration of the permit, a review will be made as to whether or not we will seek extension of the permit.

At the actual time of closure, however, we will, within 60 days after receiving the final volume of waste, treat or remove from the site, all hazardous wastes in accordance with this plan. The Regional Administrator will be notified by Commerce at least 180 days before the beginning of final closure. The Wis. DNR will be notified at least 120 days before the beginning of final closure.

Step 2

The maximum inventory we could have at one time is 396 drums. At the time of closure, if we were at our maximum, we estimate it would take approximately 75 days to send all drums off site for incineration. (That is approximately two 80 drum truckloads per month) The decontamination of the incinerator would take approximately 1/2 day. Once the waste is off site, the decontamination of the drum storage would take approximately 1/2 day. We do not anticipate needing an extension of the allowed time.

Step 3

Following waste removal, the container storage area will be decontaminated by a series of steam cleaning operations, using the portable steam cleaning unit which is company owned. All waste water and residue generated will be collected at the sump area and pumped into 17E steel drums. The material will be analyzed at once. If the laboratory analysis indicates that the waste water is hazardous, it will be sent off site with all the other stored waste. If the analysis shows no evidence of contamination, the waste water and residue in these drums will be discharged to the sewer system.

The liquid waste injection system of the incinerator will be disconnected. The feeder tank, pump, lines, and nozzle of the system will be decontaminated using the steam cleaner. Any waste water generated will be handled in th same manner as described in the decontamination of the drum storage area. If the ash remaining in the incinerator is a result of incinerating a listed hazardous waste, it will be treated as a hazardous waste and sent off site for disposal. If the ash is a result of incinerating an exempted waste or non hazardous materials, then it will be discarded with other non hazardous waste.

Step 4

A professional engineer will be called upon to certify that all drums of hazardous waste have been removed and that the drum storage area and the incinerator and all relating parts have been decontaminated.

Step 5

This closure plan will be kept on file along with any revisions to the plan until certification of closure completeness has been submitted and accepted by the USEPA Region V and The Wis. DNR.

Attached is the closure cost estimate which is calculated at 1984 dollar value. This closure cost estimate will be kept on file and revised whenever a change in the closure plan affects the cost of closure. It will be adjusted annually from the date of its original development to reflect changes in closure cost brought about by inflation. The Department of Commerce's Annual Implicit Price Deflator for Gross National Product will be used to make this adjustment.

Our financial responsibility will be met by the means of an irrevocable letter of credit issued by the Marshall & Ilsley Bank, Box 2035 Milwaukee, WI 53201.

The Regional Administrator and the Wis. DNR will be notified of any adjustments in the closure cost.

CLOSURE COST ESTIMATE*

1. Removal of Final Waste Inventory	
a. Disposal cost (396 drums of various solvents @ $19.25/drum)	7,623.00
b. Warehouse labor (12 hours @ $12.00/hour)	144.00
c. Administrative costs	250.00
d. Hauling (5 trips @ $250.00/trip)	1,250.00
Subtotal	9,267.00
2. Decontamination of drum storage area and incinerator	
a. Disposal of decontaminated washes (4 drums @ 19.25/drum)	77.00
b. Labor (8 hours @ $12.00/hour)	96.00
Subtotal	173.00
3. Closure Certification	
a. Labor (P.E. 2 hours @ $30.00/hour)	60.00
Subtotal	60.00
Total Closure Cost	9,500.00

* 1984 Dollars

Irrevocable Letter of Credit

M&I Marshall & Ilsley Bank
International Banking Department
770 North Water Street
Milwaukee, Wisconsin 53201

NON-NEGOTIABLE COPY

Telephone 414 765-7680
Cable Address MARIL
Telex 0269572 MARIL

This is subject to the Uniform Customs and Practice for Documentary Credits (1974 Revision) International Chamber of Commerce, in effect on the date of issuance.

☐ This is a confirmation of the credit opened by brief wire advice under even date.
☐ This is a confirmation of the credit opened by wire under even date.

Date of Issue: February 1, 1983

Issuing Bank's Credit No.: SB 805

Advising Bank's Credit No.:

Advising Bank:

Applicant: Commerce Industrial Chemicals, Inc
5611 W. Woolworth Ave.
Milwaukee, WI 53218

Beneficiary: State of Wisconsin
Department of Natural Resources
Box 7921
Madison, WI 53707

Maximum Amount: US$10,375.00

Expiry date at our counters: February 1, 1984

We hereby issue this Irrevocable Letter of Credit in your (The Beneficiary's) favor which is available against your drafts at ----------sight---------- drawn on M&I Marshall & Ilsley Bank, Milwaukee, Wisconsin bearing the clause: "Drawn under M&I Marshall & Ilsley Bank Credit No. SB 805" accompanied by the following documents:

- A signed Beneficiary's statement declaring that, "the amount of the draft is payable pursuant to regulations issued under the authority of Section NR 180.15 or Section 181.42(10), Wisconsin Administrative Code, as amended."

Whereas the customer owns a solid waste land disposal or hazardous waste facility named CIC Inc. located in Section 26, Township 8N, Range 21E, City of Milwaukee, Milwaukee County, Wisconsin, and that facility is subject to either the closure requirements of the plan of operation approval issued by the Beneficiary, dated the _____ day of _____, 19__ and any amendments thereto or the closure requirements of Sections NR 181.42(8) and 181.44(12) and (13), Wisconsin Administrative Code, whichever is applicable to the facility.

This Letter of Credit is written to provide proof of financial responsibility pursuant to Section 144.443, Wisconsin Statutes, and Section NR 180.15 or NR 181.42(10), Wisconsin Administrative Code, to ensure compliance with the closure requirements of the plan of operation approval and any amendment thereto or the closure requirements in Section 181.42(8) and 181.44(12) and (13), Wisconsin Administrative Code, whichever is applicable, and shall inure to the benefit of the beneficiary.

☐ Documents must be presented to negotiating or paying bank within _____ days of issuance of documents evidencing shipment or dispatch or taken in charge (shipping documents) but within validity of Letter of Credit.

Shipment from

To

Partial Shipments

Transhipments

Special Conditions:

Continued on Page Two which forms an integral part of the Letter of Credit.

The negotiating bank must forward all original documents by airmail unless otherwise instructed direct to M&I Marshall & Ilsley Bank, Milwaukee, Wisconsin 53201 Attention International Banking Department.

[redacted]

M&I Marshall & Ilsley Bank

Indications of Advising Bank

Appendix 28

Place, Date, Name, and Signature of Advising Bank

cable Letter of Credit

Marshall & Ilsley Bank
national Banking Department
) North Water Street
. waukee, Wisconsin 53201

Telephone 414 765-7680
Cable Address MARIL
Telex 0269572 MARIL - M

PAGE TWO which forms an integral part of our Credit SB 805

☐ This is a confirmation of the credit opened by brief wire advice under even date.
☐ This is a confirmation of the credit opened by wire under even date.

Issuing Bank's Credit No.

Advising Bank's Credit No

Date of Issue

Advising Bank

Applicant

Beneficiary

Maximum Amount

Latest Date for Negotiation (In Country of Beneficiary)

We hereby issue this Irrevocable Letter of Credit in your (The Beneficiary's) favor which is available against your drafts at drawn on M&I Marshall & Ilsley Bank, Milwaukee, Wisconsin

bearing the clause: "Drawn under M&I Marshall & Ilsley Bank Credit No. IM_____" accompanied by the following documents:

This Letter of Credit is effective as of February 1, 1983, and will expire on February 1, 1984, but such expiration date will be automatically extended without amendment for a period of at least oneyear on February 1, 1984, and on each successive expiration date, unless, at least 90 days before the current expiration date, we notify the beneficiary and Commerce Industrial Chemicals, Inc. Milwaukee WI by certified mail that we have decided notto extend the Letter of Credit beyond the current expiration date. In the event that the Beneficiary is so notified, any unused portion of the credit will be available upon presentation of a sight draft for 90 days after the date of receipt as shown on the signed return receipt, unless other proof of financial responsibility acceptable to the beneficiary is provided to the beneficiary.

Notwithstanding the automatic renewal clause above, the Letter of Credit will hav a final expiration date of February 1, 1993, upon which date this Letter of Credit becomes null and void.

We agree that drafts drawn in accordance with the terms stipulated will be duly honored upon presentation and delivery of documents as specified if presented on or before February 1, 1984, or any extended expiry date, the final expiry date being February 1, 1993.

☐ Documents must be presented to negotiating or paying bank within_____ days of issuance of documents evidencing shipment or dispatch or taken in charge (shipping documents) but within validity of Letter of Credit.

Shipment from

To

Partial Shipments

Transhipments

Special Conditions:

The negotiating bank must forward all original documents by airmail unless otherwise instructed direct to M&I Marshall & Ilsley Bank, Milwaukee, Wisconsin 53201 Attention International Banking Department.

[redacted]

M&I Marshall & Ilsley Bank

Authorized Signature — Issuing Bank

Indications of Advising Bank

Place, Date, Name, and Signature of Advising Bank

This credit will be subject to the Uniform Customs and Practice for Documentary Credits of the International Chamber of Commerce, in effect on the date of issuance.

Attachment 6

Revised Part A

WID 980795181

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER: F W I D 9 8 0 7 9 5 1 8 1

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(Place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*: 48 10 01

[ ] 2. NEW FACILITY *(Complete item below)*

FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* YOU BEGAN OR EXPECTED TO BEGIN

B. REVISED APPLICATION *(Place an "X" below and complete Item I above)*

[XXX] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

A. PROCESS CODE – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. PROCESS DESIGN CAPACITY – For each code entered in column A enter the capacity of the process.

1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR OR GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	M

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP D

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G	
X-2	T 0 3	20	E	
1	S 0 1	21,800	G	
2	S 0 2	118	G	
3	T 0 3	17.25	E	
4				
5				
6				
7				
8				
9				
10				

CONTINUE ON

tinued from page 2.
TE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)

W I D 9 8 0 7 9 5 1 8 1

FOR OFFICIAL USE ONLY

W DUP 2 DUP

IV DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES — E. PROCESS CODES (enter)			D. PROCESSES — F. PROCESS DESCRIPTION (if a code is not entered in E)
1	D 0 01	396,000	P	S01	S 02	T03	
2	F 0 01	12,000	P	S01			
3	F 0 02	12,000	P	S01			
4	F 0 03	88,000	P	S01	S 02	T03	
5	F 0 05	100,000	P	S01	S 02	T03	
6	K 0 86	100	P	S01	S 02	T03	
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
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22							
23							
24							
25							
26							

CONTINUE ON REV

...nued from the front.

...ESCRIPTION OF HAZARDOUS WASTES *(continued)*

...SE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. *(enter from page 1)*

F M I D 9 8 0 7 9 5 1 8 1 6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail)*.

VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground-level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail)*.

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*
88 58 35	43 08 00

VIII. FACILITY OWNER

☒ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. *(area code & no.)*

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
Donald J. Michalski	Donald J. Michalski	4-23-84

OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED

ATTACHMENT 7

SPECIFIC REQUIREMENTS FOR CONTAINERS

D-1a Containers with Free Liquid

The section of our facility which is designed for hazardous waste storage is an area 65 feet by 22 feet, or 1,430 square feet. This area is located inside the brick building along the east wall approximately 40 feet from the north wall and meets the requirements for the 50 foot buffer zone. This area is kept free of ignition sources such as sparks or open flame. Warning and no smoking signs are posted on the doors to this area. Appendix 13 is the floor plan which was drawn and certified by a professional engineer. The maximum number of drums stored in this area would be 396. All drums would contain free liquids. All waste materials are compatible. Because the number of drums in each waste type is constantly changing, movable chains will be used to separate each type. This separation will eliminate the possibility of incinerating incorrect material or sending incorrect material for reclaiming. Each chain will note the waste types it separates.

D-1a1 Primary Containment Devices

All containers are metal 55 gallon drums constructed of 18 gage steel to meet DOT spec. 17E. None of the materials stored in these drums requires a lining. If a leak develops in a drum, the material will either be transferred to another drum in good condition, or the entire drum will be put into an overpack drum.

D-1a2 Container Management Practices

Prior to transfer of drums to the storage area, they are checked for proper seal and labels. They are classified according to waste type. Following the initial determination, wastes may be reclassified. If they have been reclassified, they are sent to the appropriate area. Changes are made accordingly in the operating log. Drums are palletized and taken to the storage area by forklift truck. The pallets elevate them from contact with free standing liquids, should a leak occur. The maximum storage height is 3 drums. A 2 foot aisle space is maintained for regular inspection purposes. Inspections of the containers and containment area will be carried out according to the inspection schedule. When material is scheduled for incineration it is taken by forklift, one drum at a time, to the incinerator. There the material is transferred by a manually operated pump, equipped with an overflow return line, to the reservoir of the incinerator. Once the drum is empty, (and meets the standards of CFR 40 261.7), it is no longer regulated and is sent to a barrel company for disposal. Drums are not stored in a manner that will cause them to rupture or leak.

D-1a3a,b,c, and d Secondary Containment System

The container storage will be surrounded by a 4 inch concrete curb on three sides and a 3 inch concrete curb in front. This front curb will be ramped for access by forklift. This curb will provide a holding capacity of 2,681 gallons which exceeds the 10% which is required. The calculations for this figure are found on Appendix 13. The base material is concrete and will be regularly inspected to ensure that it remains impervious to liquids and in generally good condition. As previously mentioned, drums are stacked on pallets to prevent direct contact with free standing liquids. Run on is not a factor since the drums are stored inside.

D-1a4 Removal of Liquids from Containment System

There will be a 2 foot sump area in the southeast corner of the storage area. Pumping of any spilled or leaking material would be done here with a manual transfer pump. The material would be pumped into 17E 55 gallon steel drums and returned to the storage area. Appendix 14 gives the specifications of this pump.

D-1b Containers Without Free Liquid

We do not store containers without free liquids therefore sections D-1b (1)(2)(3), and (4) are not applicable.

Operating Log

An operating log indicating the date of shipment and quantity of drums of each type will be maintained. This will allow CIC to Keep a running balance on number and type of drums in the storage area. The operating log will also indicate the dates of incineration or shipment of hazardous wastes to another HWM facility, the dates of analytical verification, and whether manifest discrepancies existed. Appendix 41 is a copy of this log.

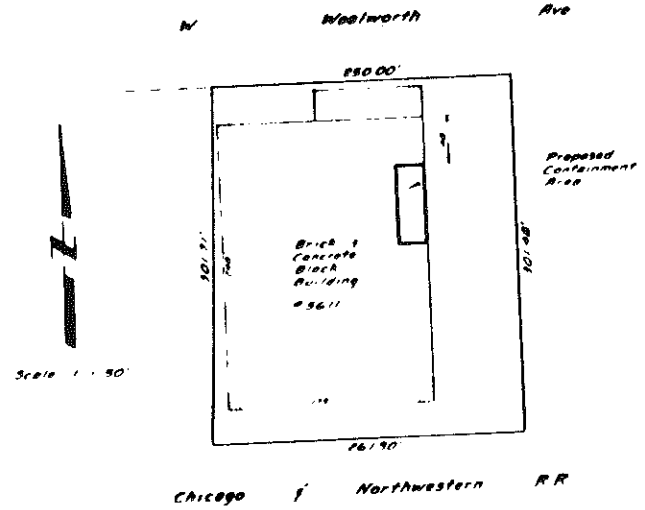
Staging of Drums Prior to Incineration

Drums that have been sampled and analyzed prior to transfer to the incineration area, or are undergoing waste analysis for ash content, heating value, chlorine content, flashpoint, and viscosity, shall be placed in a segregated, designated space. If these drums meet specified criteria they will be transferred to the incineration area, as described in container management practices, immediately prior to incineration. Drums containing waste will not be left in the incinerator area overnight, or when the unit is not operating. Empty drums will be removed from the incinerator area immediately after use.

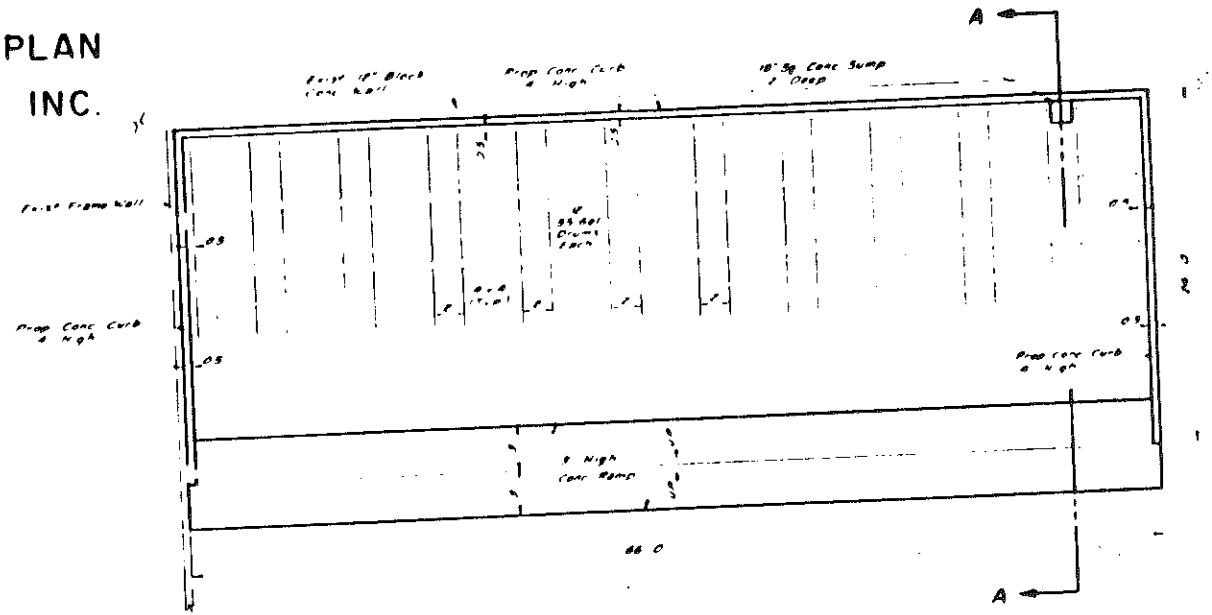
HAZARDOUS WASTE CONTAINMENT PLAN
COMMERCE INDUSTRIAL CHEMICALS INC.

5611 W. WOOLWORTH AVE.
MILWAUKEE, WISC. 53218

Appendix 13

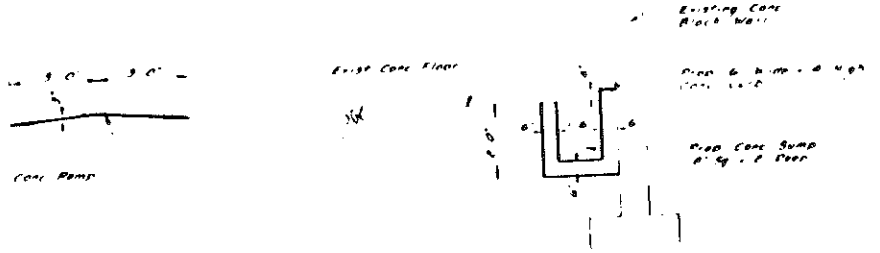


LOCATION MAP



PLAN

Scale 1/4" = 1'-0"



SECTION A-A

DESIGN DATA

R. A. Smith & Assoc. Inc.
MUNICIPAL INDUSTRIAL SANITARY AND TRANSPORTATION ENGINEERS
PHONE (414) 786-1777

CITY OF MILWAUKEE
COMMERCE INDUSTRIAL CHEMICALS INC
HAZARDOUS WASTE CONTAINMENT PLAN

SHEET 1 OF 1

PUMP SPECIFICATIONS

This pump is a rotary pump model 1000 from National Spencer Inc.

It is self priming, vane type.

It adapts to 15, 30, or 55 gallon drums.

It has a 3/4" discharge spout with hose.

It has a discharge rate of approximately 1 gallon per 16 revolutions.

This pump is manually operated.

OPERATING LOG FOR TYPE _____

Appendix 41

Note any discrepancies in manifest or analysis on back. Give disposition.
Prior to incineration, 10% of all type 1 must be analyzed for ash content, heating value, chlorine content, flashpoint, and viscosity.
Prior to incineration, 20% of all type 2 must be analyzed for the above.
Type 3 must never be incinerated.

PREVIOUS BALANCE _____

ATE	MANIFEST NUMBER	# DRUMS REC'D	GENERATOR	DATE VERIFIED BY ANALYSIS	# DRUMS SHIPPED	TO	10/20 % CHECK	# DRUMS INCINERATED	BALANCE

ATTACHMENT 8

SPECIFIC REQUIREMENTS FOR TANKS

D-2 Tanks

The only tank involved in our waste operation is an 118 gallon feeder reservoir which is an integral part of our incinerator. A completely pre-wired and pre-piped tank/flow control unit contains the 118 gallon reservoir, pump, motorized flow control valve, manual valves, pressure and vacuum switches, and filter screen, all in a corrosion resistant steel cabinet. An inner compartment for the feeding of type Is hazardous waste will be installed so that type Is may be used as start-up fuel.

The reservoir is manufactured by the Kelley Company of Milwaukee under the design standards of the Kelley Company. It is constructed of 12 gauge steel and has a wall thickness of .105 inches. It is an open reservoir with a cover, therefore, the internal and operating pressures are the atmospheric pressure. The temperature is the ambient temperature. The maximum height of liquid is 29 inches. It is at this level that the over-flow recycle/return line will be installed.

Refer to section C-1 for the type of waste passing through this reservoir.

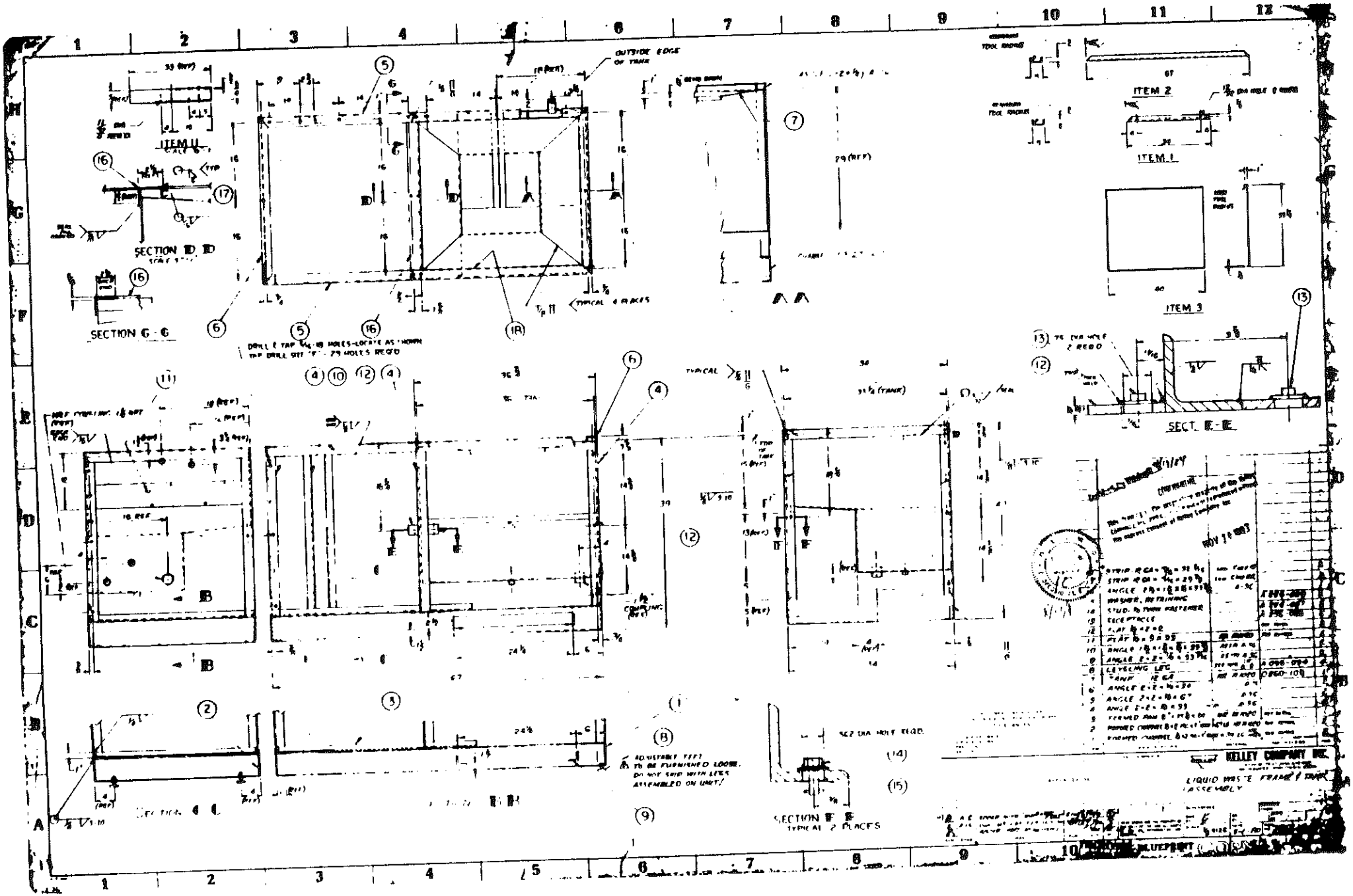
D-2b Tank Corrosion and Erosion

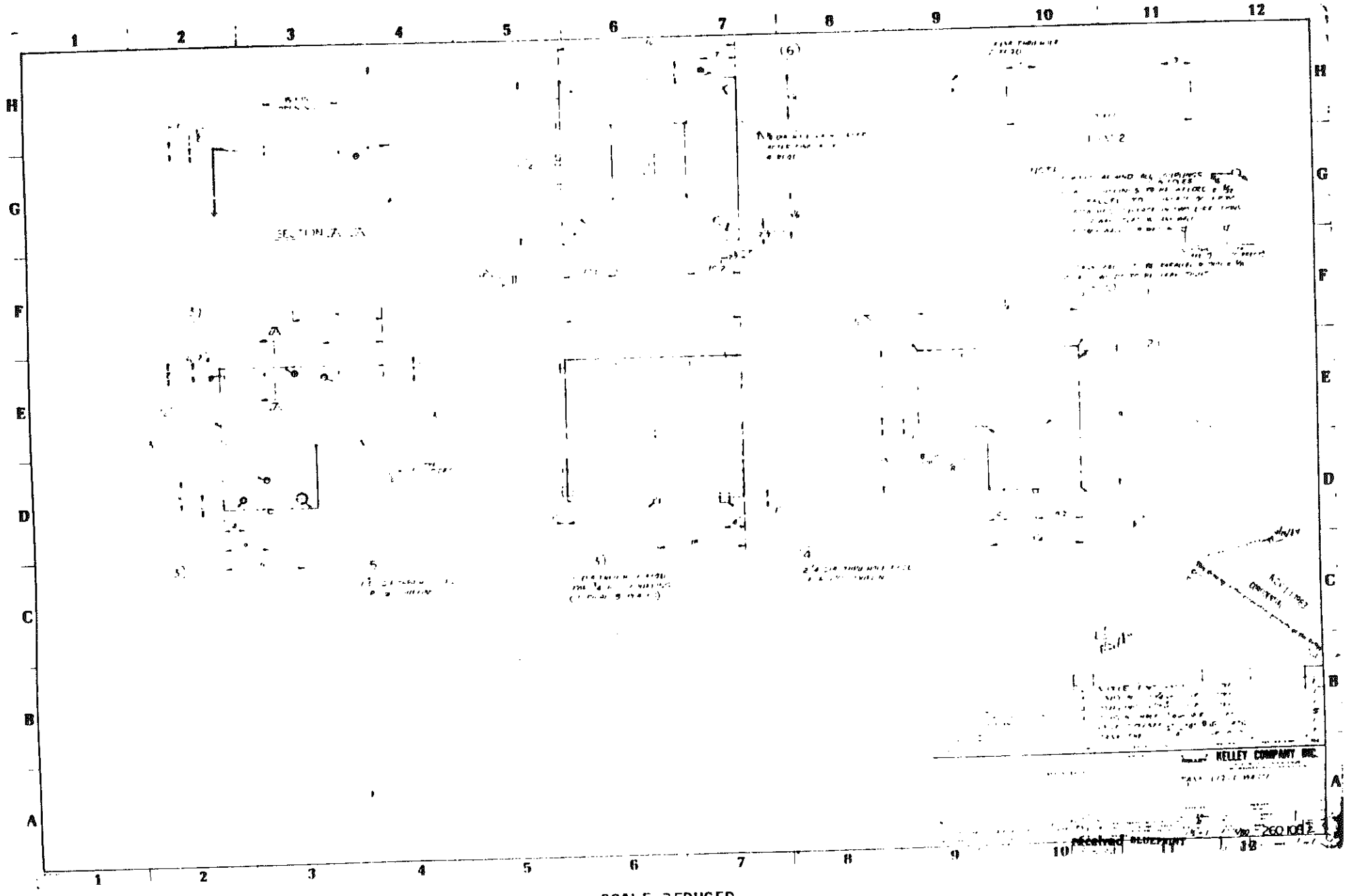
The reservoir thickness will be checked yearly. There is no lining in the reservoir. Again, refer to section C-1 for types of wastes which will pass through this reservoir.

D-2c Tank Management Practices

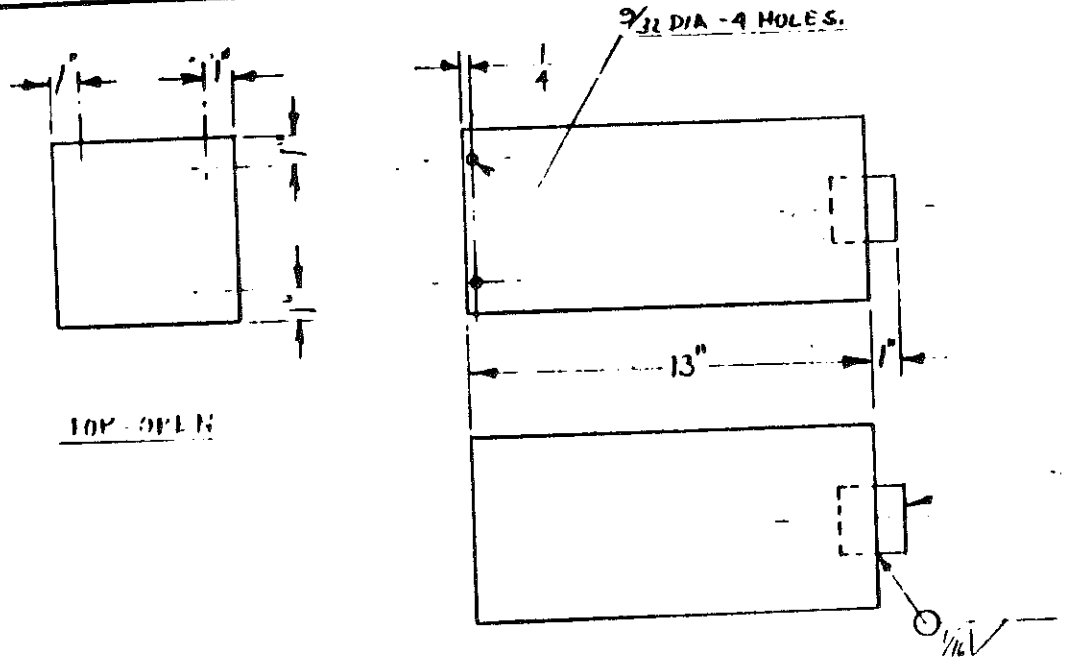
The tank is filled manually one drum at a time using a manual transfer pump. An overflow recycle/return line will be connected from the reservoir to the drum to prevent overfilling. Only wastes which are compatible with the reservoir will be put into it. The maximum specific gravity for liquids put into the reservoir is 1.5. Only ignitable wastes will be put into the reservoir. The reservoir is placed in such a way that it is protected from any conditions which may cause material within the reservior to ignite. This is done by having a lid on the reservoir, having it in a non smoking area, having all sources of open flame removed, and having it within a locked building. A 50 foot buffer zone is also maintained. Inspections are carried out as required in CFR 40 264.194.

The tank's fluid level shall be inspected once each operating day prior to filling and once after incinerator shutdown according to the inspection log. Any hazardous waste that is not incinerated will be removed from the tank, pumped into a drum, and returned to the storage area. A separate reservoir and feed line shall be installed in the main reservoir to accommodate type Is hazardous waste which shall be used as start-up fuel for the incinerator. This separate reservoir and feed line shall be in operable condition before hazardous wastes may be stored in the tank.


ITEM 1
ITEM 2
ITEM 3
SECTION D-D
SECTION G-G
SECT. E-E
SECTION F-F
TYPICAL 2 PLACES
KELLEY COMPANY INC.



SCALE REDUCED



NOTE:

1. ALL WELD SEAMS TO BE LEAK TIGHT.
2. PAINT FLAT BLACK EPOXY POWDER COAT PER WRIGHT METAL PROCESSORS, 1700 W CORNELL MIL, WI. 263-1144

WISCONSIN
RIFFE I ERLANDSSON
E 14404
MILWAUKEE, WIS.

5/9/19

ITEM	DESCRIPTION	MATERIAL	PART/PIECE NO	REQ
2	COUPLING 1½ NPT			1
1	CONTAINER 14 GA.			1

ALL DIMENSIONS IN INCHES
DO NOT SCALE DWG REMOVE ALL BURRS
TOLERANCES
UNLESS OTHERWISE SPECIFIED
3 PLACE DECIMALS ± .010
2 PLACE DECIMALS ± .030
FRACTIONS ± 1/32
ANGLES ± 1°

USED ON MODELS

KELLEY COMPANY INC.
6730 N TEUTONIA AVENUE
MILWAUKEE WISCONSIN 53209

STARTER TANK

SUPERSEDES | REVISED FROM

DWG BY CLEW | CK BY | APP'D BY

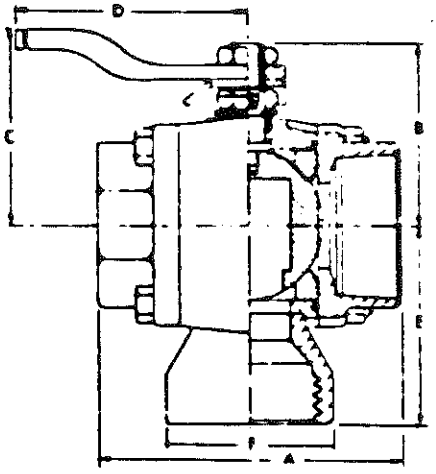
SCALE 1/4 | DATE 5-24-84 | DWG NO 260-226 | REV 1

SYM 1 | ZONE | ORIGINAL RELEASE | WAS | ECO | DATE 6 8 84 | BY DC

THESE DRAWINGS ARE THE PROPERTY OF THE KELLEY CO INC AND ALL RIGHTS OF USE OR REPRODUCTION ARE RESERVED

SHEET ___ OF ___

ITEM	DESCRIPTION	MATERIAL	PART PIECE NO	REQ



PORTING #2

0° POSITION

180° POSITION

INCHES

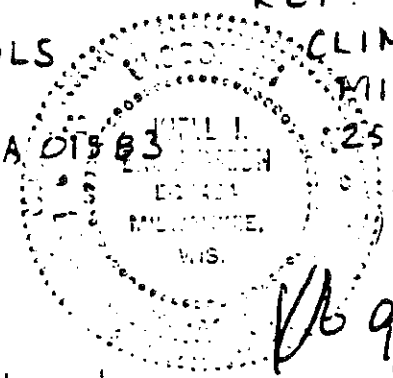
Valve	A	B	C	D	E	F	Side Port	Bottom Port
1½"	4.53	2.88	3.12	7.00	3.56	2.25	1.25	1.12

1½ SIZE
3-WAY
BRASS BODY
316 SS BALL & STEM
TFE SEAT
SCREWED END
TYPE 2 PORTING

VALVE PART NO
T416TSEV2

MFG.
WORCESTER CONTROLS
125 HARTWELL ST.
WEST BOYLSTON MA 01583
617/835-6041

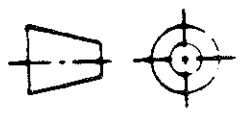
REP.
CLIMATIC CONTROL
MILW WIS
259-9070



9/5/84

SYM	ZONE	WAS	ECO	DATE	BY
V	1	ORIGINAL RELEASE			

USED ON MODELS



ALL DIMENSIONS IN INCHES
DO NOT SCALE DWG
REMOVE ALL BURRS

TOLERANCES
UNLESS OTHERWISE SPECIFIED

3 PLACE DECIMALS	± .010
2 PLACE DECIMALS	± .020
FRACTIONS	± 1/32
ANGLES	± 1°

KELLEY COMPANY INC.
8720 N TEUTONIA AVENUE
MILWAUKEE WISCONSIN 53209

VALVE - MANUAL
3-WAY 1½ NPT

SUPERSEDES	DERIVED FROM	
DWG BY LEH	CK BY	APP'D BY
SCALE ~	DATE 5-29-84	DWG NO 261-272 REV 1

TELEDYNE POST N46122

SHEET ____ 0

ATTACHEMNT 9

INCINERATOR DRAWINGS & PLANS

1. Detailed Engineering Description of Incinerator

The incinerator we intend to use is manufactured by the Kelley Company and is a model 380 B batch incinerator.

We are using data in lieu of a trial burn. We will, however, conduct a shakedown period during which only exempted waste will be incinerated. This will be used as training for our incinerator operators, and to cure the refractory of the incinerator itself. Once our operators become qualified, an independent PE will certify that the incinerator operators are, in fact, qualified. We will then start to incinerate our type 2 waste in the manner required to conform to the conditions in this permit.

The incinerator used in the trial burn was also a Kelly Company model 380 B batch incinerator equipped with the Kelley Liquifire (TM) liquid waste injection system. The Kelley Company has provided certification that the two units are substantially identical, except where US EPA has required modifications to the commercial unit.

2. Type of Incinerator

The incinerator shall be a factory built, packaged incinerator consisting of; incinerator proper, burners, and stack.

It shall have a capacity of 330 pounds per charge (approximately 2 hours burning time) of waste having 6500 BTU's per pound. The incinerator shall be a Kelley Model 380 B as manufactured by Kelley Company Inc., of Milwaukee, WI.

The incinerator shall use a two stage waste combustion process. The first step shall be a pyrolysis process, whereby combustible gases are generated by partial combustion of the refuse. The second stage shall be a complete burnout of the pyrolysis gases.

The pyrolysis process shall take place in a cylindrical refractory lined chamber, into which the refuse is charged. This chamber shall have a volume of 3.8 cubic yards. The burnout process shall take place in a cylindrical thermal reactor with a residence time sufficient for complete burnout.

Combustion air to support the pyrolysis process shall be supplied by a fan mounted integral with the unit. The pyrolysis chamber shall be connected to the thermal reactor, where the gaseous pyrolysis products are mixed with air and ignited by burner(s) mounted on the inlet end of the thermal reactor. The thermal reactor shall then provide for complete combustion of the gases. The air for this purpose shall be supplied partially by the combustion air from the burner(s) and partially by the natural draft. The exhaust of the thermal reactor shall be connected to a stack. The incinerator system shall operate without the use of scrubbers or other mechanical collection devices.

3. Linear Dimensions of the Incinerator Unit Including the Incinerator Unit Including the Cross-sectional Area of Combustion Chamber

The outer shell of the pyrolysis chamber shall be constructed of steel plate not less than .188 inch thick. The steel shell shall have a four inch lining of high temperature castible refractory backed up with one inch insulation. The refractory shall be secured to the steel shell with stainless steel anchors. Two steel air distribution tubes shall be embedded in the refractory along the lower portion of the pyrolysis chamber. The inside diameter of the pyrolysis chamber shall be 56.0 inches and the inside length shall be 75.3 inches.

One end of the chamber shall be fitted with a large hinged door providing complete access. Two screw type sealing devices and hasp for a padlock are to be provided. A 25 inch by 27 inch charging door is to be located in the large door. Both doors are to be gasketed, insulated and lined with the same type of insulation and refractory as the pyrolysis chamber.

The thermal reactor shall be connected to the top of the pyrolysis chamber. The thermal reactor shall be constructed of not less than .12 inch hot rolled steel and be lined with 3 inches of 3000°F refractory. The upper portion of the thermal reactor shall have a series of air ports, which shall be cast into the refractory.

The stack shall be 15 inches inside diameter and be fabricated from AISI 304 stainless steel not less than .06 inches thick. It shall be equipped with a stainless steel spark arrestor. The top of the stack shall extend to 27 feet from grade.

4. Description of the auxiliary fuel system.

During incineration of hazardous wastes, auxiliary fuel shall not be used. Type 1s hazardous waste shall be used to ignite the combustion chamber.

5. Capacity of Prime Mover

A fan manufactured by the Dayton Electric Manufacturing Co. (or equivalent) draws the combustion gases through the system. This fan, model 2C820, has a nominal capacity of 530 CFM at 1" SP at 0.38 shaft horsepower, operating at 3450 rpm.

6. Description of Automatic Waste Feed Cut Off Systems

SYSTEM	CUTOFF LIMIT
Pump inlet pressure	Greater than 20" Mercury
Pump outlet pressure	Greater than 50 PSI
Air Pressure Switch	Less than 50 PSI

SYSTEM	CUTOFF LIMIT
Main Chamber Temperature	Below 1300°F Above 1600°F
Secondary Chamber Temperature	Below 1700°F Above 2300°F
Injector Nozzle	When it is not extended .
Combustion Gas Velocity	Greater than 2850 Ft/Min (Act)
Carbon Monoxide	Greater than 100 PPM
Waste Feed Rate	Greater than 15 gal/hr (plus 15% tolerance)

A. The pump inlet shall be fitted with a vacuum switch, designed to shut down the pump when inlet screen is plugged. It shall also be connected to a vacuum gauge mounted on a gauge panel on top of tank unit.

B. The pump outlet shall be fitted with a pressure gauge, designed to shut down the pump when pressure becomes excessive. It shall also be connected to a pressure gauge mounted on the gauge panel on top of the tank unit. The gauge panel shall include a manual on/off switch for the pump and a green pilot light indicating status of pump operation. All electrical devices and wiring on the tank unit shall be designed for hazardous locations, class 1, division 1, Group D according to NEC article 500. The liquid feeder shall be controlled from a central NEMA 12 control enclosure which shall contain all temperature controllers, relays, timers, pushbuttons, and pilot lights necessary to operate the system.

C. Control enclosure shall contain three full scale indicating two set-point temperature controllers, operating from thermocouples in incinerator main chamber and incinerator exhaust. Function of each controller and set point shall be clearly marked and with enclosure door closed visible to operator.

First temperature controller shall monitor incinerator main chamber temperatures and permit operation of the system when temperature is between the two selected set points.

When the trip switch is in the 'hazardous position', thermocouple #2 controls the low end temperature cut-off in the secondary chamber at 1700°F. Another set point on this controller shall have a standard 4-20 milliamp signal output and moderate waste flow via the modulating motorized valve such that temperature is maintained at or near 1800°F. When the trip switch is in the "type Is" position, the low end cut-off trip is bypassed such that type Is hazardous waste may be incinerated at temperatures below 1700°F. Thermocouple #3 shuts off the waste feed whenever the temperature reaches 2300°F. (See diagram 271-332)

A repeat timer shall be included to adjust the speed of the motorized valve in order to avoid wide temperature swings due to excessive rate of change in flow.

D. Injector shall be mounted on the main combustion chamber on the incinerator. It shall be mounted on a slide and be retractable by a pneumatic cylinder with integral directional control valves. Pre-wired limit switches shall be included and sense both fully extended and fully retracted positions. A mechanical lock shall be provided to keep the injector in the retracted position in case of air pressure loss.

The injector nozzle shall be of the compressed air atomizing type and have a 5/16" diameter. liquid emissions point. Atomization shall take place at a point outside the nozzle by compressed air streams hitting the liquid stream. A pressure control box shall be mounted between the tank unit and the injector. This control box shall have clearly marked liquid and compressed air inlets and outlets. The outlets shall be field connected to the injector with flexible tubes, having a solvent resistant inner liner and a bronze braid outside jacket.

This control panel shall have a compressed air pressure reducing valve and output gauge to enable setting of atomizing air pressure. The control panel shall also contain two solenoid valves for control of compressed air flow. One shall control flow of atomizing air and one shall provide air to purge the liquid line from pressure control panel to injector. The control panel shall include a compressed air pressure switch, which will shut down the pump in case pressure drops below a pre-set value.

Interlocks:

The system shall be equipped with the following start-up interlocks:

1. Minimum Main Chamber temperature must be reached to assure reliable light-off.

2. Maximum Main Chamber temperature must not be exceeded in order to avoid emissions.

3. Compressed air pressure must exceed a pre-set minimum to assure operation of pneumatic cylinder and proper atomization cylinder and proper atomization.

4. Minimum exhaust temperature must not be exceeded in order to avoid emissions.

5. Maximum exhaust temperature must not be exceeded in order to avoid emissions.

6. Liquid level in the tank must exceed pre-set minimum.

7. Incinerator charge door must be closed.

8. Injector must be retracted.

The system shall be equipped with the following running interlocks:

9. All the interlocks specified 1 through 7 above.

10. Vacuum at pump must stay within a preset maximum to avoid pump cavitation. Vacuum switch shall have manual pushbutton re-set on control panel.

11. Pressure at pump outlet must stay within a preset maximum. Pressure switch shall have manual pushbutton re-set on control panel.

12. An interlock shall be provided with the motorized modulating valve and shut down the system should valve be at or near the minimum or maximum feed rate position.

13. Injector must be extended before pump starts.

14. If exhaust temperature reaches the maximum limit, the system shall shut down. Shut down will also occur if temperature declines below minumum range.

Operating Sequence

If all the start-up interlocks have been satisfied, system shall start the following sequence:

1. A delay timer shall start to permit the motorized valve to go the minimum feed rate position.

2. Injector shall extend.

3. Atomizing air shall start up.

4. Motorized valve shall move from minimum flow position.

5. Pump shall start.

6. Feed rate shall now be fully modulated, and in case of high BTU liquid waste, the system shall modulate toward the upper modulation temperature

set point. In case of water based, or low BTU liquids, the system shall modulate toward the low modulation set point. Shut down shall occur as described in C.

7. If during operation any of the interlocks are disengaged, the system shall go through the following shutdown sequence.

8. Pump stops.

9. A compressed air valve opens and purges liquid line with air.

10. After a pre-set delay, purge air and atomizing air stops and injector retracts.

11. When all the interlocks again are satisfied, a new start-up sequence and operating sequence shall commence.

E. The enclosure shall have a main system on/off switch, a push button to reset the liquid pressure and vacuum switches and a pilot light indicating operating status of pump. Enclosure shall contain the starter for the liquid pump motor.

F. Waste feed will automatically cutoff at greater than 17.2 gal/hr. This will be accomplished by a cam switch running directly on the axis of the output shaft of the modulating motor which controls the flow rate of liquids to the injector nozzle. A description of this cam can be found in Appendix 47.

G. Combustion gas velocity will result in automatic cutoff at greater than 2850 ft/min by utilizing the velocity head to give a direct indication of the actual stack velocity. Since the stack velocity is a direct function of velocity head, temperature, barometric pressure, and molecular weight, and since the latter three are relatively constant, we can assume that the actual stack velocity is directly proportionate to the velocity head. Velocity head will be measured using an Inconel "S" type Petot tube directly in the exit flue gas stream and connected to a photohelic sensor equipped with high and low shut-off contacts. These contacts will be set so that when velocity head reaches the equivalent level of 2850 ft/min, the system will automatically shut down.

7. Stack Gas Monitoring and Pollution Control Equipment

The stack gas will be analyzed for CO. This will be done through a gas sampling assembly leading to a Lira Model 202 Luft-type Infrared Analyzer (or equivalent). A description of this analyzer is given in Appendix 42.

Hot flue gases will enter an Inconel sampling probe located approximately 2 diameters below the exit height of the stack. A glass wool filter will be employed to remove particulate matter from the gas stream. Gas will

then flow through approximately 15 to 20 feet of copper tubing, directly into a stainless steel condensate trap that is equipped with a drain. The dry and clean flue gas will flow into a silica gel moisture trap to insure that the gasses are dry. The negative side of the silica gel trap is connected to a gas pump which is connected to a flow meter and finally to the NDIR CO analyzer. The exhaust port of the CO analyzer will be recirculated to the incinerator itself.

Cutoff will result at greater than 100 PPM by the use of a Honeywell AR100 (or equivelant) Recorder/Controller. Appendix 48 contains information on this equipment.

8. Nozzle and Burner Design

The injector nozzle shall be of the compressed air atomizing type and have a 5/16" diameter liquid emission point. The pyrolysis chamber and the thermal reactor shall be fitted with a natural gas burner. The burner shall be rated at 800,000 BTU's per hour and be capable of being turned to 50,000 BTU's per hour. The pyrolysis chamber burner is to be temperature controlled with overriding timer and equipped with safety controls. The thermal reactor burner is to be timer controlled and equipped with safety controls. A pre-purge timer shall be provided in order to assure safe light-off of the burners.

9. Construction Materials

The incinerator shall be a factory built, packaged incinerator consisting of; incinerator proper, burners, and stack.

The outer shell of the pyrolysis chamber shall be constructed of steel plate not less than .188 inch thick. The steel shell shall have a four inch lining of high temperature castible refractory backed up with one inch insulation. The refractory shall be capable of surface temperatures up to 2,550°F. The refractory shall be secured to the steel shell with stainless steel anchors. Two steel air distribution tubes shall be embedded in the refractory along the lower portion of the pyrolysis chamber. The inside diameter of the pyrolysis chamber shall be 56.0 inches and the inside length shall be 75.3 inches.

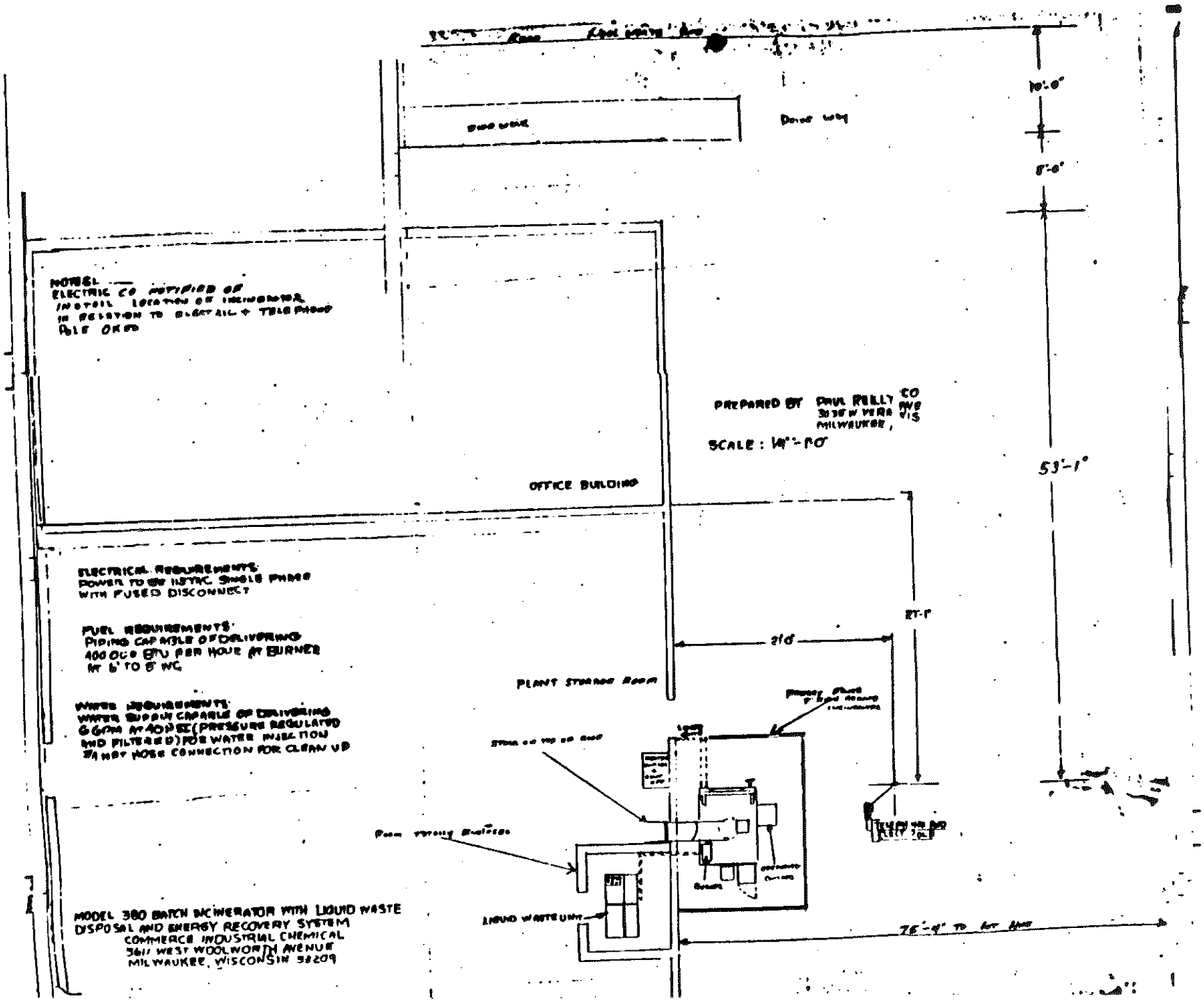
One end of the chamber shall be fitted with a large hinged door providing complete access. Two screw type sealing devices and hasp for a padlock are to be provided. A 25 inch by 27 inch charging door is to be located in the large door. Both doors are to be gasketed, insulated and lined with the same type of insulation and refractory as the pyrolysis chamber.

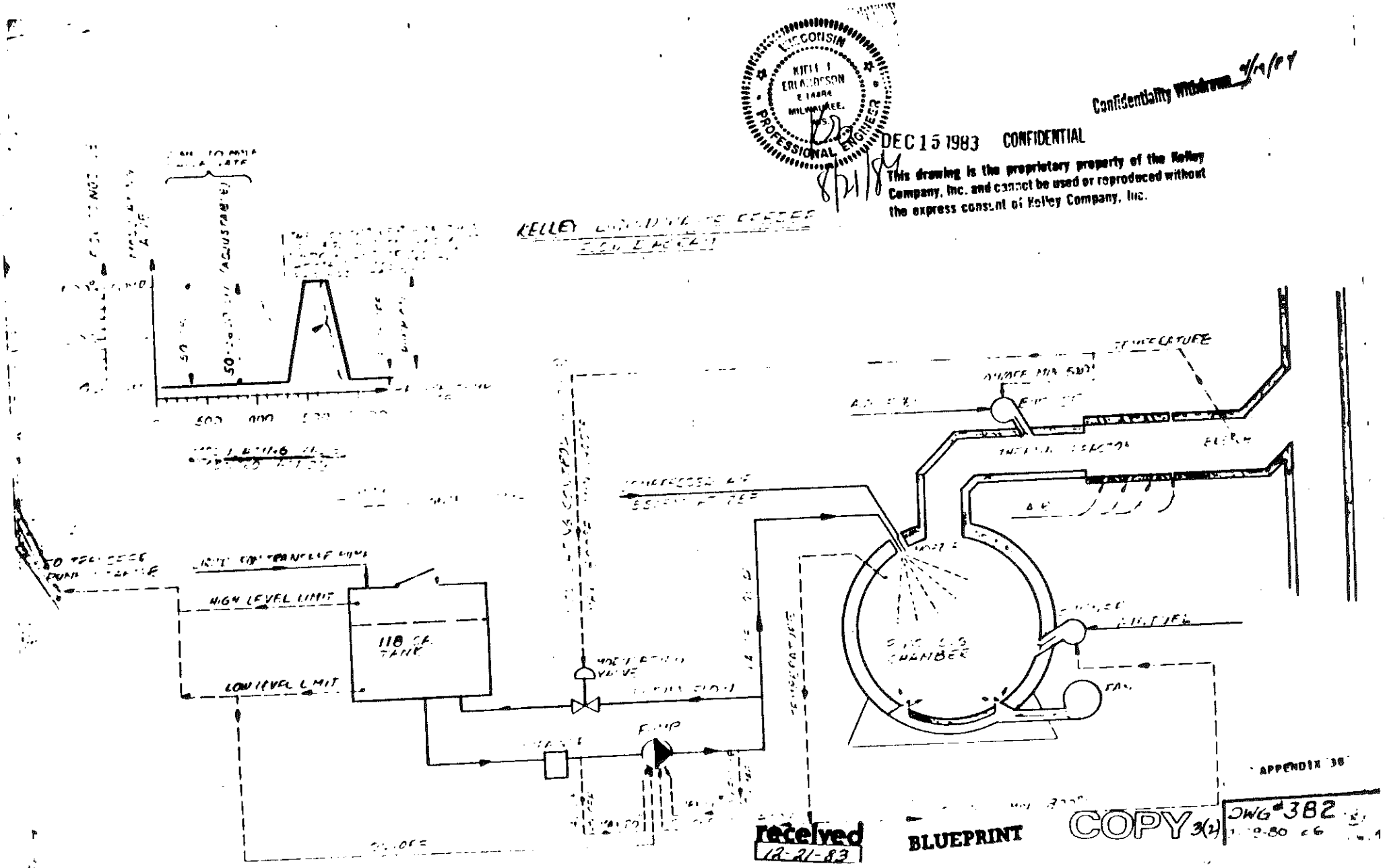
The thermal reactor shall be connected to the top of the pyrolysis chamber. The thermal reactor shall be constructed of not less than .12 inch hot rolled steel and be lined with 3 inches of 3000°F refractory. The upper portion of the thermal reactor shall have a series of air ports, which shall be cast into the refractory.

The stack shall be 15 inches inside diameter and be fabricated from AISI 304 stainless steel not less than .06 inches thick. It shall be equipped with a stainless steel spark arrestor. The top of the stack shall extend to 27 feet from grade.

10. Location and Description of Temperature, Pressure, and Flow Indicating and Control Devices.

Owing to the fact that the incinerator hasn't been constructed, and since under the terms of its RCRA permit, CIC would be required to modify the standard Kelley model incinerator under a compliance schedule, the location and description of certain controls can not yet be detailed. However, the location and description of temperature and pressure controls is detailed in several drawings and Kelley company literature appended to this Attachment.


NOTES:
ELECTRIC CO NOTIFIED OF
INSTALL LOCATION OF INCINERATOR
IN RELATION TO ELECTRIC & TELEPHONE
POLE OKED
PREPARED BY PAUL PELLY CO
SCALE: 1/8"-1'0"
OFFICE BUILDING
ELECTRICAL REQUIREMENTS:
POWER TO BE 115VAC SINGLE PHASE
WITH FUSED DISCONNECT
FUEL REQUIREMENTS:
PIPING CAPABLE OF DELIVERING
400,000 BTU PER HOUR AT BURNER
AT 6" TO 8" WC
WATER REQUIREMENTS:
WATER SUPPLY CAPABLE OF DELIVERING
6 GPM AT 40 PSI (PRESSURE REGULATED
AND FILTERED) FOR WATER INJECTION
3/4 HOSE CONNECTION FOR CLEAN UP
PLANT STORAGE ROOM
21'-0"
53'-1"
LIQUID WASTE UNIT
MODEL 380 BATCH INCINERATOR WITH LIQUID WASTE
DISPOSAL AND ENERGY RECOVERY SYSTEM
COMMERCE INDUSTRIAL CHEMICAL
5611 WEST WOOLWORTH AVENUE
MILWAUKEE, WISCONSIN 53209



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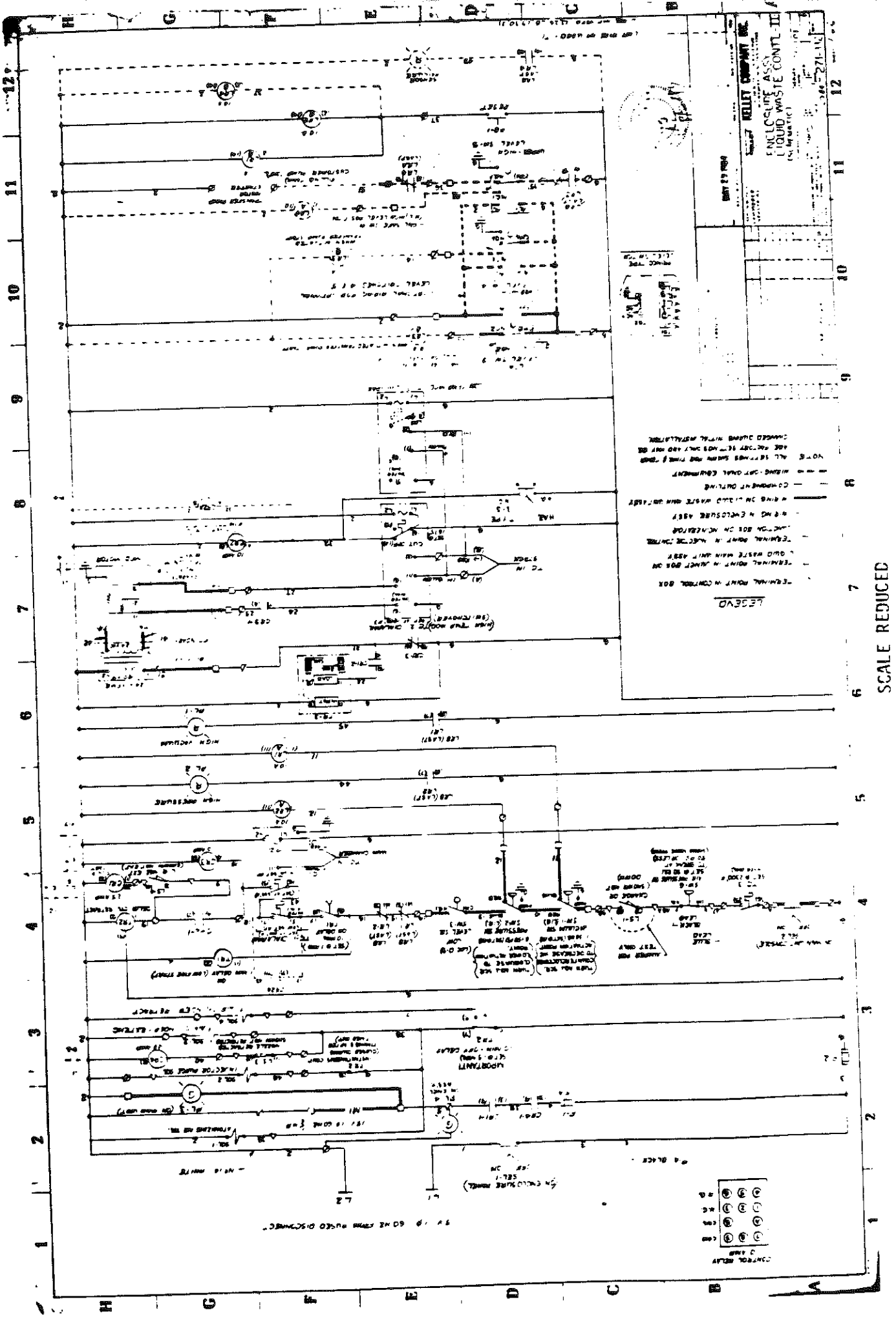

KELLET COMPANY INC.
ENCLOSURE ASSY
LIQUID WASTE CONTL II
SCALE REDUCED

MSA INSTRUMENTS

Lira® Model 202 Luft-type Infrared Analyzer

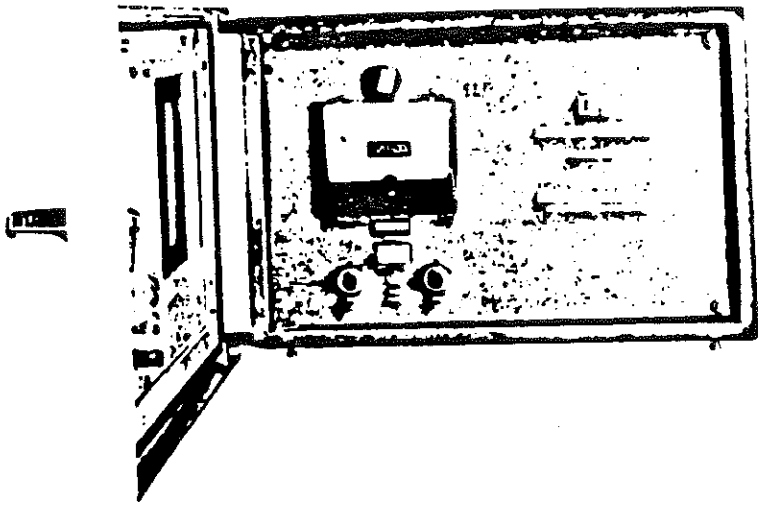
Appendix 42

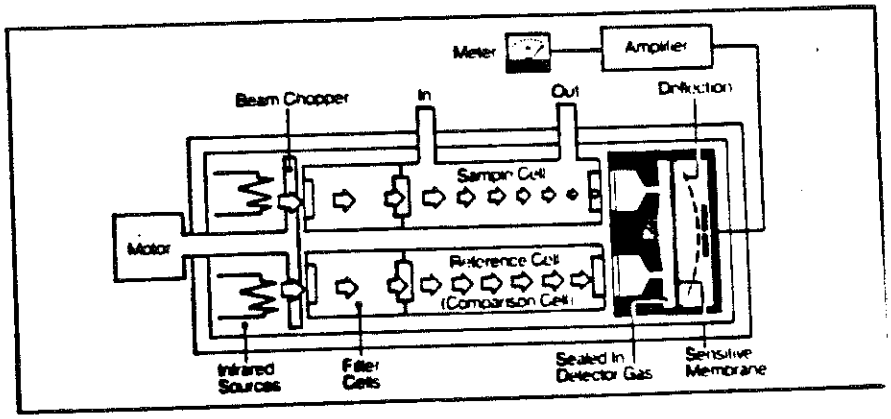
Application

The Lira Model 202 Luft-type Infrared Analyzer is a highly selective instrument designed to monitor and display the results of gas analysis in industrial applications and environments. The Model 202 provides quick, accurate, and automatic analysis of a selected component in simple or complex mixtures of gases, vapors, or liquids. It can detect any component of interest that absorbs infrared energy, including methane, ethyl chloride, ethylene chloride, ethyl and methyl alcohol, fluorinated hydrocarbons, carbon monoxide, carbon dioxide, sulphur dioxide, and others. (Elemental diatomic gases such as hydrogen, oxygen, nitrogen, chlorine and the rare gases are not infrared active.)

The Model 202 Analyzer can be applied in stack monitoring and furnace control, air pollution measurement, combustion control, automobile exhaust monitoring, detection of toxic or explosive concentrations of gases, vapors and liquids, and personnel protection.

The Model 202 not only monitors and measures toxic gases, but can also be used to interface with computers, actuate ventilating equipment, shut down a process, and give audible and visual signals before predetermined danger levels are reached.





Description

The Lira Model 202 Analyzer operates on the Nondispersive Infrared (NDIR) absorption principle. Twin beams of infrared radiation are projected through parallel cells; one beam traverses the sample cell, the other beam the comparison cell. The emergent radiation is directed into a single detector cell that is responsive at an infrared wavelength where the component of interest absorbs infrared and background component(s) are transparent. An interrupter, or "chopper," located between the radiation source and the cells alternately blocks radiation to the sample cell and the comparison cell. When the infrared beams are equal, an equal amount of radiation enters the detector cell from each beam.

When the gas to be analyzed is introduced into the sample cell, it absorbs (and reduces) the radiation reaching the detector via the sample beam. Consequently, the beams become unequal, the radiation entering the detector flickers as the beams are alternated, and the detector gas expands or contracts in response with the flicker.

This movement of the detector gas causes the microphone membrane to move in response. The membrane movement varies the condenser microphone's electrical capacity which, in turn, electronically results in an electrical signal proportional t the difference between the two radiation beams; i.e., concentration of the component of interest. The signal is then amplified and fed to the indicating meter. The signal can be used as input to external recorders, alarms, or control loops.

Typical specifications

Performance

Principle of operation: Nondispersive infrared (NDIR) spectroscopy
Speed of response:
Model 202 : 90% of final reading in 5 seconds
Model 202 FR: 90% of final reading in 0.4 seconds to 1.5 seconds (field adjustable); 4-position switch
Noise level: Less than 1% of full scale
Zero drift: Less than 1% of full scale in 24 hours
Span drift: Less than 1% of full scale in 24 hours
Calibration curve: Determined and provided for each instrument
Repeatability: ±1% of full scale
Linearity: Normally within +5%—always less than +10%
Temperature effect: Analyzer internally thermostated by proportional controller at 130°F (55°C) with overtemperature protection at 150°F (65°C) permitting operation from 30-115°F (0-45°C)
Electronics: Completely solid-state, plug-in circuit boards for amplifier, power supply, source voltage regulator and signal output
Controls: Precision, multiturn potentiometers with counting dials for zero and span

Operating

Power requirements: 500 VA, 115 Vac, 60 Hz; 50-Hz designs also available
Warm-up time: 30 minutes—Instrument provided with lamp (heater) to indicate temperature control cycle
Output:
Millivolt—field adjustable—0-10, 0-100 mV; any standard potentiometer recorder can be employed
Voltage (optional)—0-1, 0-5, 0-10 Vdc, 50 mA maximum
Current (optional)—0-1, 0-5, 0-20, 4-20, 0-50, 10-50 mA, 10 Vdc maximum—output commons can be floating or grounded
Line voltage variation: Analyzer provided with a constant voltage power supply to compensate for line voltage variations from 95 V to 130 V
Vibration effect: Unaffected by normal plant vibration
Remote mounting: Recorder can be mounted up to 2,500 ft from analyzer; remote zero and span location up to 2,500 ft from sensor
Calibration: Calibration accomplished by using known gas on liquid samples for zero and span at instrument
Span check: Precision resistor in source circuit simulates gas presence in Lira cell, actuated by push-button on front panel
Options:
Dual Range: Instrument can be provided with dual range unit for secondary ranges up to a 10x factor
Linearization: A linearization circuit can be provided to correct calibration curve to within ±1% of a straight line response

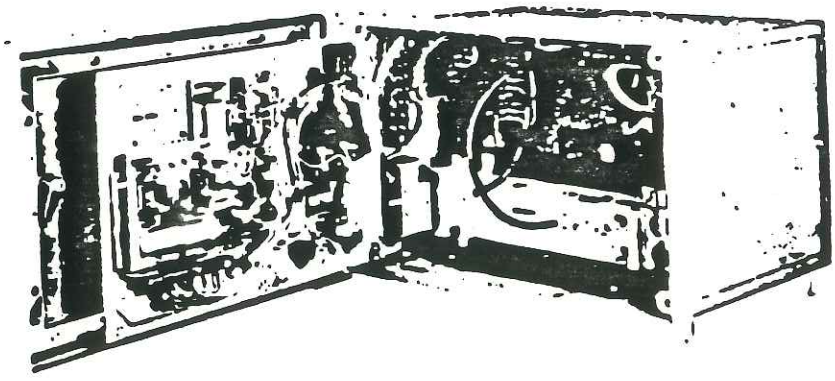
Physical

Construction: Analyzer complete with integral meter—explosion-proof or nonexplosion-proof design—recorder optional
Dimensions:
Model 202, 19"W x 13"D x 12½"H (483 x 331 x 318 mm); General Purpose design
Model 202X, 20⅜"W x 18"D x 14"H (518 x 458 x 356 mm); Class I, Groups B, C, D, Division 1 design
Model 202S, 37½"W x 12"D x 9"H (953 x 305 x 229 mm); General Purpose Long Cell design
Model 202SX, 39½"W x 14½"D x 12⅜"H (1004 x 369 x 315 mm); Class I, Groups B, C, D, Division 1 Long Cell design
Model 202FR, 19"W x 13"D x 12½"H (483 x 331 x 318 mm); General Purpose design
Weight:
Model 202, 76 lb
Model 202X, 105 lb
Model 202S, 60 lb
Model 202SX, 210 lb
Model 202FR, 76 lb
Tubing: Flexible, corrosion resistant, solid type available
Inlet-Outlet: ⅛" NPT
Sample cells: Aluminum block with stainless steel insert, internally gold-plated; length up to 8" standard, up to 20" long for high sensitivity applications. Cells also available in nickel and Monel Metal* designs
Windows: Sapphire, quartz, calcium fluoride, barium fluoride, rock salt, etc., depending on application

Ordering information

For formal quotation please contact MSA, and describe compound to be analyzed and approximate stream analysis.

*Trademark of the International Nickel Co., Inc.



Note: This Data Sheet contains only a general description of the Lira Model 202 Luft-type Infrared Analyzer. While uses and performance capabilities are described, under no circumstances should this product be used except by qualified, trained personnel and not until the instructions, labels, and other literature accompanying the product have been carefully read and understood and the precautions therein set forth followed. Only they contain the complete and detailed information concerning this product.

MSA
Mine Safety Appliances Company
Instrument Division
600 Penn Center Boulevard
Pittsburgh, Pennsylvania 15235
Atlanta, Boston, Chicago, Cleveland, Detroit, Houston, Los Angeles, Milwaukee, New York City, Philadelphia, Pittsburgh, San Francisco, St Louis.
MSA CANADA, Downsview, Ontario (Metro Toronto)

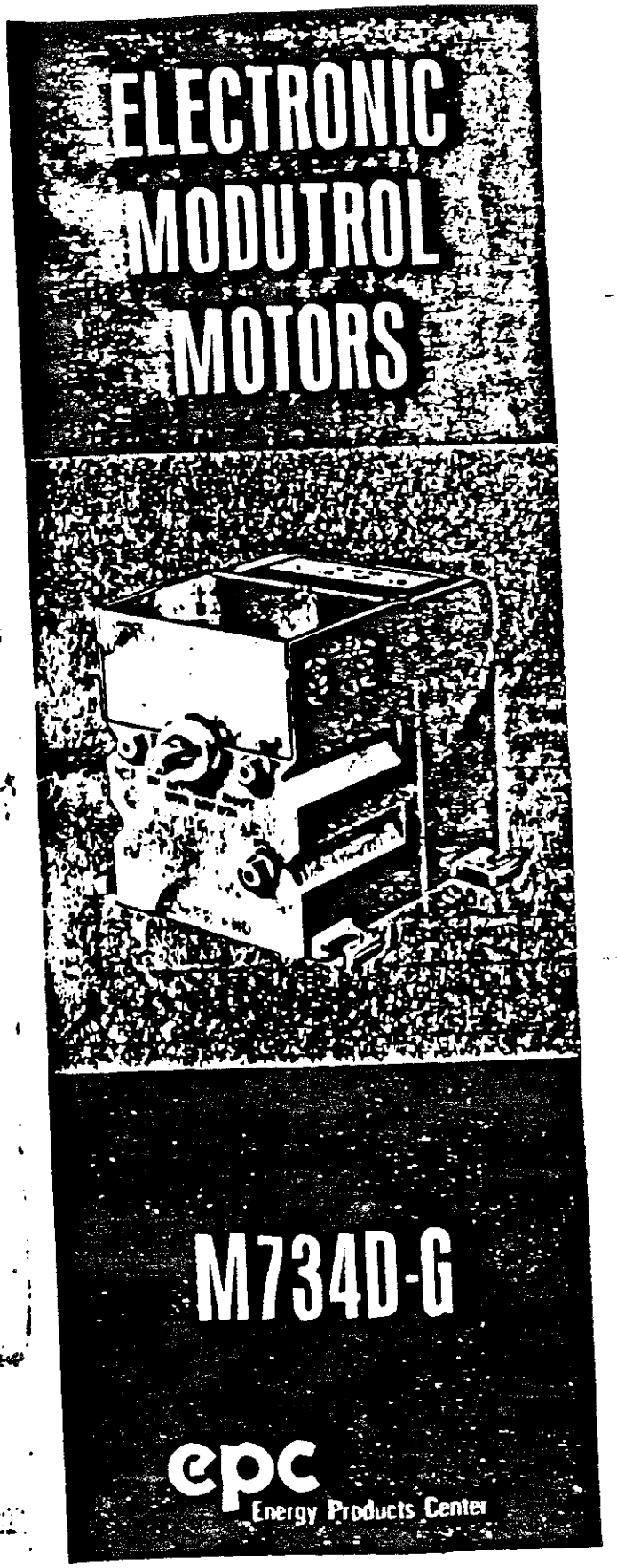
Data Sheet 07-05517
Printed in U S A 825 (L)

Honeywell

Appendix 47

THE M734D-G ELECTRONIC MODUTROL MOTORS ARE USED IN HONEYWELL ELECTRONIC CONTROL SYSTEMS TO PROVIDE PROPORTIONING CONTROL OF DAMPERS AND GAS, HOT WATER, STEAM, OR CHILLED WATER VALVES.

- ☐ M734D and M734F are normally closed; M734E and M734G are normally open.
- ☐ All models have integral isolation transformer.
- ☐ M734D,E provide 35 lb.-in. [4.0 N•m] torque.
- ☐ M734F,G provide 75 lb.-in. [8.5 N•m] torque.
- ☐ Solid state control circuit..
- ☐ Solid state motor drive circuit.
- ☐ Oil-immersed gear train.
- ☐ Available with 90 or 160 degree fixed stroke.
- ☐ Available with 1 adjustable internal auxiliary switch.
- ☐ Models for use on 24, 120, or 240 Vac input.
- ☐ Use with 80 lb. [36.3 kg] valve linkage only.
- ☐ Uses most standard Modutrol motor accessories, except Q601J Valve Linkage.



D.M.
REV. 12-80•

Form No.
60-2345—4

AUXILIARY SWITCH ADJUSTMENT

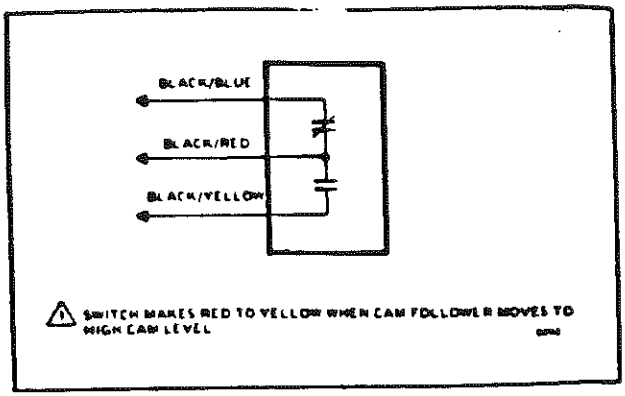


FIG. 5—THE AUXILIARY SWITCH IN THE M734 HAS COLOR-CODED LEADWIRES.

SWITCH OPERATION

The auxiliary switch in the M734 is operated by a cam on the motor shaft. The switch is made R to Y when the cam follower is on the upper level of the cam and made R to B when the cam follower is on the lower cam level. When the slow-rise portion of the cam is used, the switch differential is about 10 degrees or rotation.

NOTE: Do not use the fast-rise portion of the switch if fast cycling is undesirable.

ADJUSTMENT PROCEDURE

The following switch adjustment procedure applies to the normally closed motor. To adjust the normally open motor, start with the motor in the full open position and reverse the direction of rotation of the cams during adjustment.

1. Run motor to the full closed position.
2. Loosen the locking screws on the cam assembly about 1/2 turn.

NOTE: Do not remove cam assembly from motor.

3. Rotate the cam counterclockwise on the shaft until the switch makes (audible click) on the slow-rise portion of the cam.
4. Determine how many degrees of shaft rotation is desired before the switch makes. Do not set cams less than 5 degrees from the end of the stroke for pilot duty; 20 degrees from end of stroke for motor loads.

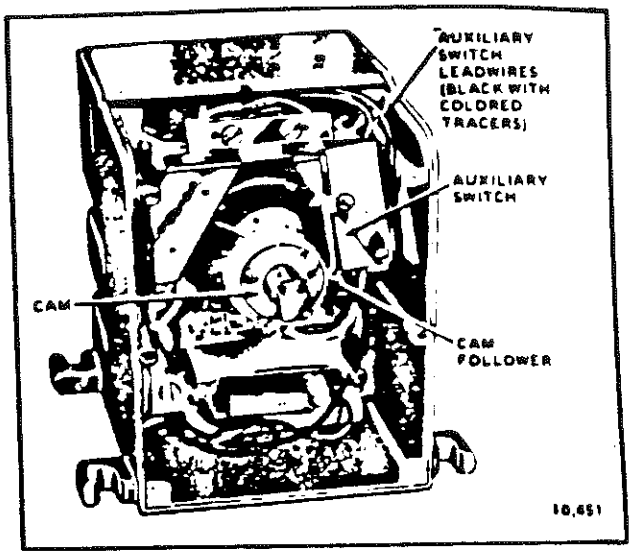


FIG. 6—INTERNAL VIEW OF THE M734 WITH AUXILIARY SWITCH (auxiliary end).

5. Select a reference point and turn cam clockwise the required number of degrees. Each division on the cams equals 15 degrees of motor rotation. EXAMPLE: If 60 degrees of motor rotation is desired before switch operates, turn cam 4 index marks from the reference point.
6. When adjustments are complete, tighten the locking screws on the cam assembly.

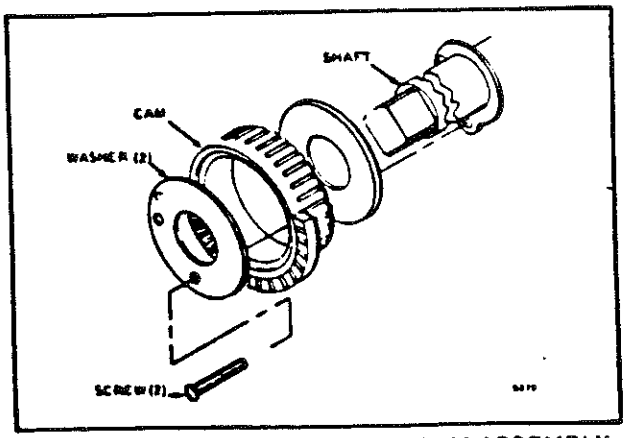


FIG. 7—EXPLODED VIEW OF THE CAM ASSEMBLY.

OPERATION

The M734D-G operate in response to a modulating voltage signal from the electronic system central processor, positioning a valve or damper at any position between fully open and fully closed.

The signal from the central processor causes the bridge circuit in the motor to become unbalanced. The small signal resulting from the bridge unbalance is amplified and energizes 1 of 2 Triac switches to run the motor. As the motor runs, a feedback potentiometer driven by the motor moves to rebalance the bridge. When the bridge is balanced, the motor stops.

SPECIFICATIONS

IMPORTANT

THE SPECIFICATIONS GIVEN IN THIS PUBLICATION DO NOT INCLUDE NORMAL MANUFACTURING TOLERANCES. THEREFORE, THIS UNIT MAY NOT MATCH THE LISTED SPECIFICATIONS EXACTLY. ALSO, THIS PRODUCT IS TESTED AND CALIBRATED UNDER CLOSELY CONTROLLED CONDITIONS, AND SOME MINOR DIFFERENCES IN PERFORMANCE CAN BE EXPECTED IF THOSE CONDITIONS ARE CHANGED.

MODELS:

M734D-G Electronic Modutrol Motors are for use with electronic system central processors. Each model is available with 1 internal auxiliary switch. See TABLE 1 below for specific models.

TABLE 1–M734D-G MODUTROL MOTORS

MODEL	ELECTRICAL NORMAL POSITION[a]	TORQUE		APPLICATION
		lb-in.	N·m	
M734D	Closed	35	4.0	Economizer or 2-way Valve Actuator[b]
M734E	Open	35	4.0	Economizer or 3-way Valve Actuator[b]
M734F	Closed	75	8.5	Economizer
M734G	Open	75	8.5	Economizer

[a] Electrical normal position defined as position of motor when motor powered but a zero signal from central processor is presented to the motor.

[b] For use on systems where full heat on power failure is not important.

ELECTRICAL RATINGS:

Voltage and Frequency—24, 120, or 240 Vac, 50/60 Hz.

Power Consumption

M734D,E—27 W, 43.2 VA.

M734F,G—33 W, 57.6 VA.

STROKE: 90 or 160 degrees, fixed.

MOTOR TIMING:

90 degree stroke—30 seconds, nominal.

160 degree stroke—1 minute, nominal.

AUXILIARY SWITCH RATINGS (in amperes): All models available with 1 internal spdt auxiliary switch. Switch ratings apply to 1 contact only; opposite contact rated at 40 VA pilot duty, 120/240 Vac.

	120 Vac	240 Vac
Full Load	8	4
Locked Rotor	48	24

MAXIMUM DEAD WEIGHT LOAD ON SHAFT:

Power End—100 lb. [45.4 kg].

Auxiliary End—50 lb. [22.7 kg].

AMBIENT TEMPERATURE RANGE:

M734D,E—minus 40 to plus 150 F [minus 40 to plus 66 C] at 25 percent duty cycle.

M734F,G—minus 40 to plus 130 F [minus 40 to plus 54 C] at 60 Hz; minus 40 to plus 115 F [minus 40 to plus 47 C] at 50 Hz.

MAXIMUM DAMPER AREA:

M734D,E—23 sq. ft. [2.2 sq.m].

M734F,G—50 sq. ft. [4.7 sq.m].

CRANKSHAFT: Double-ended, 3/8 in. square [2.5 sq.cm].

DIMENSIONS: See Fig. 1.

(continued on page 3)

ORDERING INFORMATION

WHEN PURCHASING REPLACEMENT AND MODERNIZATION PRODUCTS FROM YOUR TRADELINE WHOLESALER OR YOUR DISTRIBUTOR, REFER TO THE TRADELINE CATALOG OR PRICE SHEETS FOR COMPLETE ORDERING NUMBER.

SPECIFY—

1. **Order number.**
2. **Voltage at 50/60 Hz.**
3. **Motor stroke.**
4. **Auxiliary switch, if desired.**
5. **Accessories, if desired.**

IF YOU HAVE ADDITIONAL QUESTIONS, NEED FURTHER INFORMATION, OR WOULD LIKE TO COMMENT ON OUR PRODUCTS OR SERVICES, PLEASE WRITE OR PHONE:

1. **YOUR LOCAL HONEYWELL RESIDENTIAL SALES OFFICE (CHECK WHITE PAGES OF YOUR PHONE DIRECTORY).**
2. **RESIDENTIAL GROUP CUSTOMER SERVICE**
   HONEYWELL INC., 1885 DOUGLAS DRIVE NORTH
   MINNEAPOLIS, MINNESOTA 55422 (612) 542-7500

   (IN CANADA—HONEYWELL CONTROLS LIMITED, 740 ELLESMERE ROAD, SCARBOROUGH, ONTARIO) INTERNATIONAL SALES AND SERVICE OFFICES IN ALL PRINCIPAL CITIES OF THE WORLD.

Honeywell

Series AR 100 Recorder-Controller

Specification

Appendix 48

Function

Honeywell's series AR 100 recorder-controller instruments are designed for reliable operation, accurate measurement, and precise recording and controlling of any process variable that can be translated into a voltage or resistance signal in industrial processes.

Two basic models are available: single-pen (Figure 1) and two-pen (Figure 2). Both models can be equipped with independent control forms and alarm functions for the control of industrial processes and machinery. An optically activated event switch is also available on single-pen models.

Integral cam programmed set point models are available for single-pen recorders with independent control forms and alarm functions as well as auxiliary cam functions. See Specification 53-01-03-01.

The AR 100 recorder-controller is ideally suited for applications involving the recording and controlling of environmental chambers, food processing machines, furnaces and ovens, and packaging machinery.

Honeywell offers a full line of sensors and transmitters that produce a compatible range of dc voltage or current signals which can be used as input to the AR 100 recorder-controller. These devices measure:

- Temperature (thermocouple or RTD)
- Pressure
- Flow
- Liquid Level

} (4 to 20 mA or 1 to 5 Vdc process transmitter)

- Humidity (gold grid sensor)

Description

Enclosure

AR 100 recorder-controller is enclosed in a case that is designed for surface or panel mounting.

The case is of durable foamed Noryl* resin construction with a gasketed, glass windowed door. Knockouts for wiring are provided in the bottom and sides of the case. All cases have knockouts and mounting hardware.

*Registered Trademark

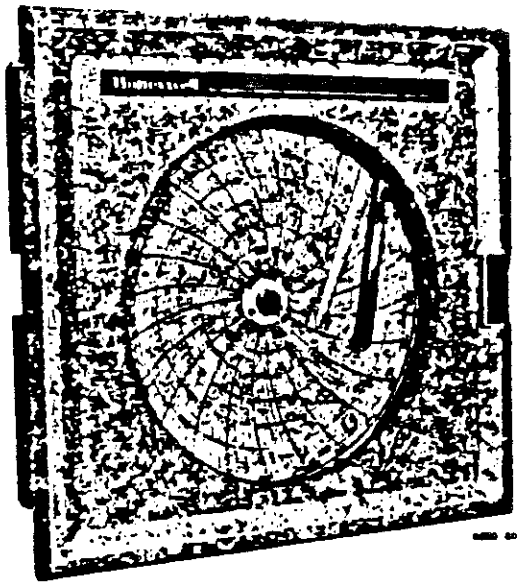


Figure 1 – Single-Pen Unit

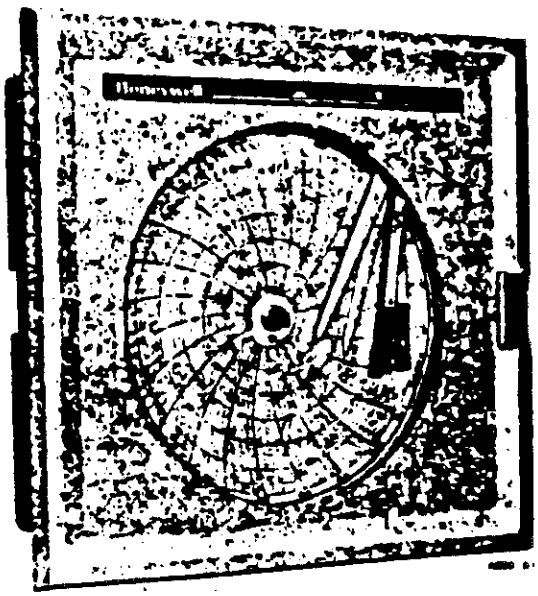


Figure 2 – Two-Pen Unit

Components

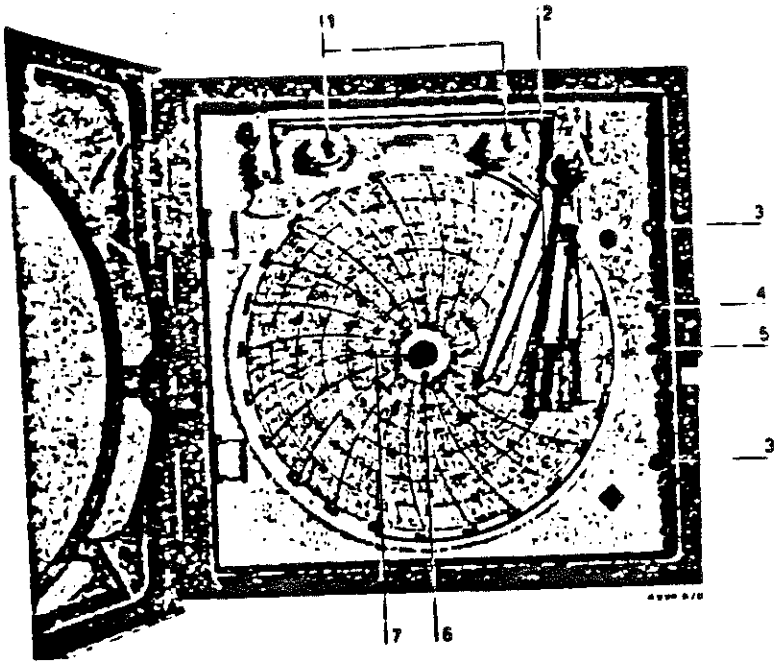
With the door open (Figure 3), the hinged chart plate swings out 90 degrees for convenient component access (Figure 4). The display components, as well as some parts of the instruments servo balance system, are located on the chart plate. Display components include the 10-inch diameter chart, chart drive assembly, disposable fiber-tip pen cartridge and index setting mechanism (on controller models only). The chart plate has an access hole for each manual reset adjustment on proportional controllers, a manual reset switch (and a signal light) for each limit controller, and a time index mark for chart time alignment. Synchronous chart drive motors provide two different chart speeds. Tapered hub and locating pin on the chart drive assembly assure correct alignment when chart is renewed. Assembly has a clutch for initial time alignment, or resetting in case of power interruption. Pen arm carries disposable fiber-tip, snap-on pen cartridge.

The servo balance system consists of solid state circuitry located on the main printed circuit board mounted in the rear of the case, and a servo assembly mounted on the back of the chart plate. The servo balance system converts electrical signals from process variable sensors into precise mechanical positions. Basically, this system measures an unknown emf or potential by balancing the unknown emf against a known or calibrated emf established by the position of a contactor on a slidewire.

Solid state circuitry integrates power supply, measuring circuit, preamplifier and pen positioning servo functions. Plug-in range resistors make field range changes possible. The servo assembly includes an ac servo motor and a precision wound rebalancing slidewire; it also includes a set point wiper on models with a control form. Servo motor directly drives the wiper and the pen arm for accurate input signal tracking and reliable pen motion.

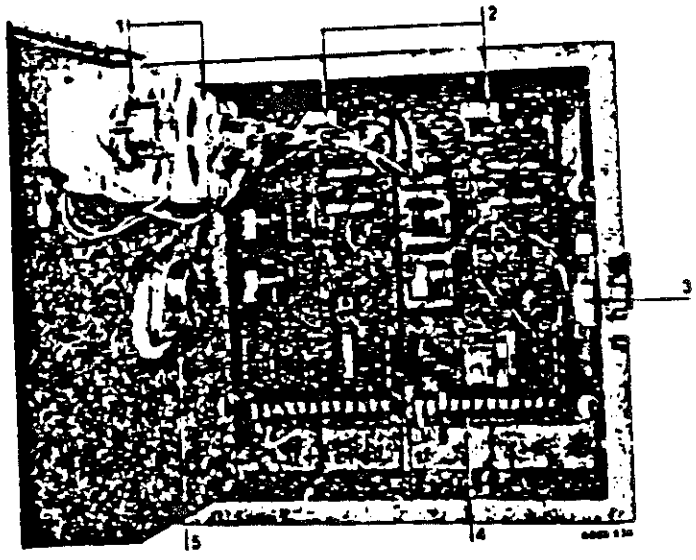
Field wiring connects to the screw terminals on the barrier connector strip at the bottom of the printed circuit board.

Two-pen models have two independent servo balance systems with or without independent control forms. See Control Selections for control form description. The separate ac servo motors drive their respective pens through a common pivot point with mechanical linkages. Color coded pens make traces easy to identify.



LEGEND
1. Control Index Knobs
2. Control Index Pointers
3. Chart Plate Latching Screws
4. Access Holes for Manual Reset Adjustments
5. Disposable Fiber-Tip Pen Cartridges – Red and Purple
6. Chart Locating Pin
7. Tapered Hub

Figure 3 – Door Open



LEGEND
1. Servo Assemblies – No. 1 and No. 2 Pens
2. Typical main Printed Circuit Boards
3. Manual Reset Adjustment – Proportional Control
4. Screw Terminals for Field Wiring
5. Chart Drive Assembly

Figure 4 – Chart Plate Open

PRELIMINARY CHECKS

The following checks should be performed every eight (8) hours and every time the feeder system is energized for operation.

1. The air pressure gauge should read between 50 and 70 psi. Air pressure can be regulated by adjusting the air pressure regulator (see item 11, Figure 1).

2. Check the fluid level in the reservoir. The feeder system will not operate if the fluid level is below the low level sensing unit (see Figure 2).

3. Check the exterior and interior liquid lines and piping, which connects the injection unit with the injector nozzle, for leaks.

4. Check all hosing to be sure it is not rubbing or chaffing.

5. Check the liquid strainer to be sure that the strainer basket is free of dirt and debris. A plugged or partially plugged strainer will cause a high vacuum and shut the feeder system down. To clean the strainer, proceed as follows (see Figure 2).

A. Turn the ball valve to the "Off" position.

B. Turn the "T" handle of the strainer to the left until the top of the strainer releases.

C. Remove the basket inside the strainer and clean it in a suitable solvent for the type of fluid being disposed of.

D. Reinstall the clean basket into its position in the strainer.

E. Realign the basket's cover and tighten the "T" handle securely.

F. Open the ball valve to the full "Open" position.

6. Clean out the drip pan which is located beneath the feeder system's reservoir (see Figure 2).

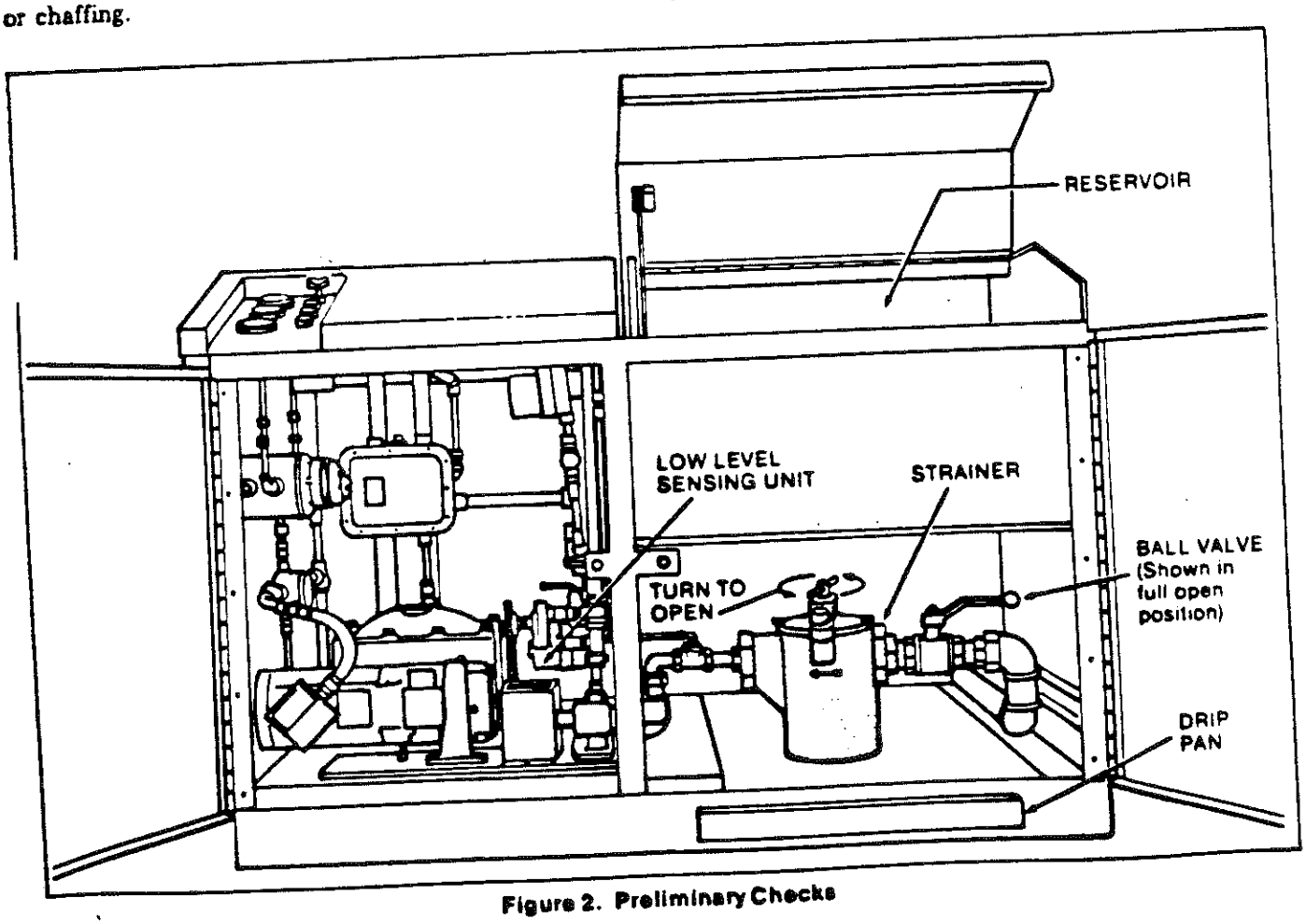


Figure 2. Preliminary Checks

7. Check the injector nozzle to be sure there are no obstructions in either the air passages or the fluid port.

8. Check the lever arm on the limit switches which are a part of the injector nozzle guide. Be certain there are no obstructions to hamper its operation.

9. Check the **Central Control Panel's** controls to be certain no one has tempered with the settings (see Figure 3).

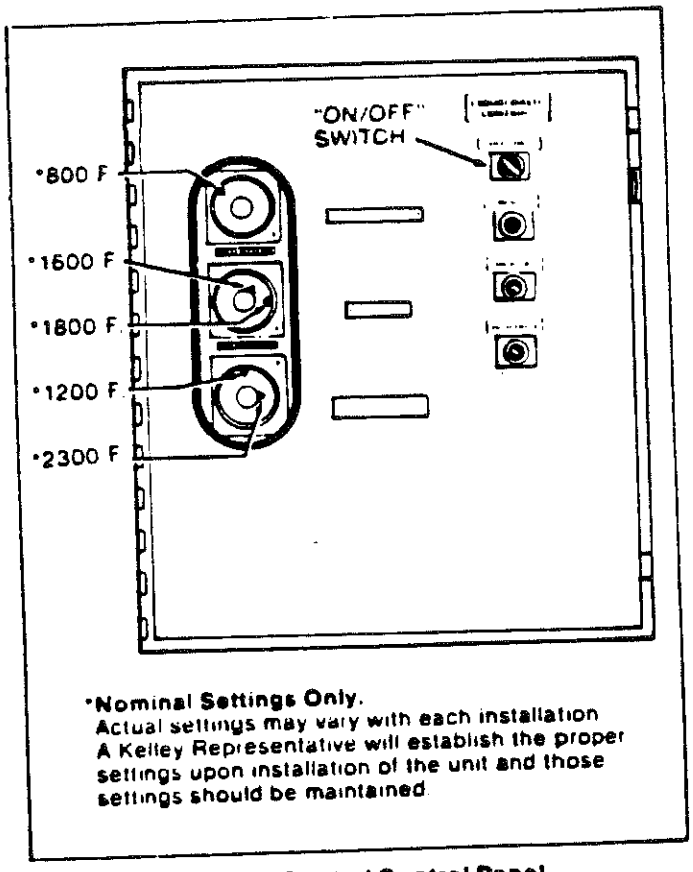


Figure 3. Central Control Panel

10. Open all red handled shut-off valves to the full "Open" position.

11. Perform all checks to the incinerator, per the Incinerator Owner's Manual. The incinerator must be operating and the main chamber temperature above 800°F. before the Liquid Waste Feed System will operate. However, the Liquid Waste Feeder System is fully automatic and can be activated at the initial start-up of the incinerator. It will then automatically start to function when all operating conditions have been met.

STARTING PROCEDURE

To start the Liquid Waste Feeder Syste proceed as follows (see Figure 3).

1. Turn the "On/Off" switch, located in t central control panel, to the "On" position. This v supply power to the injection system.

2. Turn the "Off/Auto" switch, located on t feeder unit, to the "Auto" position. This will sup power to the Liquid Waste Feeder pump and automatic features of this machine will than t over. One minute after the "Off/Auto" switcl turned, the "System On" lamp should light.

NOTE

The "System On" lamp will not light until the main chamber temperature reaches 800°F., nor will this light remain on at all times. Lamp ONLY INDICATES THAT PUMP IS OPERATING.

SHUT DOWN PROCEDURE

To shut the Liquid Waste Feeder System d proceed as follows (see Figure 3).

1. Turn the "Off/Auto" switch, which is ted on the Liquid Waste Feeder System's co panel, to the "Off" position.

2. When the nozzle is automatically withd from the chamber (approximately two (2) min the "On/Off" switch, located in the central co panel, should be turned to the "Off" position.

CAUTION

Be certain that the injector nozzle ha been drawn out of the pyrolysis chambe before the "On/Off" switch is turned t the "Off" position. If the switch is turne to the "Off" position before the nozzle i withdrawn, the nozzle will stay in th chamber. This can cause damage to th injector nozzle.

B.1.4

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

Name of Permittee: Commerce Industrial Chemicals

Facility Location: 5611 W. Woolworth Ave., Milwaukee, Wisconsin

EPA Identification Number: WID 980-795-181

Effective Date: August 20, 1987

Expiration Date: September 26, 1995

Authorized Activities

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 USC §6901 et seq., commonly known as RCRA) and the 1984 Hazardous and Solid Waste Amendments and regulations promulgated thereunder by the U.S. Environmental Protection Agency (U.S. EPA) codified and to be codified in Title 40 of the Code of Federal Regulations), a permit is issued to Commerce Industrial Chemicals (hereafter called the Permittee), to operate a hazardous waste storage facility located in Milwaukee, Wisconsin at latitude 88° 58' 15", and longitude 43° 08' 00". You are authorized to conduct the following hazardous waste management activities:

X Storage	___ Treatment	___ Disposal
X Container	___ Tank	___ Injection Well
___ Tank	___ Surface Impoundment	___ Landfill
___ Waste Pile	___ Incinerator	___ Land Application
___ Surface Impoundment	___ Other	___ Ocean Disposal
		___ Surface Impoundment

Applicable Regulations:

The conditions of this permit were developed in accordance with the applicable provisions of 40 CFR Part:

X 261	X 264, Subpart G	___ 264, Suhpart L
X 262	X 264, Subpart H	___ 264, Subpart M
X 264, Subparts A-E	X 264, Subpart I	___ 264, Subpart N
___ 264, Subpart F	___ 264, Subpart J	___ 264, Subpart O
	___ 264, Subpart K	X 270

Permit Approval

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applications regulations contained in 40 CFR Parts 260 through 264 and 270 and 124 as specified in the permit and relevant provisions of HSWA. Applicable regulations are those which are in effect on the date of issuance of this permit (see 40 CFR §270.32(c)).

This permit is based on the assumption that the information submitted in the permit application attached to the Permittee's letter dated February 9, 1983, and any subsequent amendments (hereafter referred to as the application) is accurate and that the facility will be constructed and operated as specified in the application. Any inaccuracies found in this information may be grounds for the termination or modification of this permit (see 40 CFR §270.42 and §270.43) and potential enforcement action. The Permittee must inform U.S. EPA of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (the Amendments) were enacted to modify RCRA. Under Section 206 of the Amendments, all RCRA permits issued after the date of enactment must provide for corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit. Based on information submitted by Permittee on March 12, 1985, and subsequent review of such information by the State of Wisconsin and U.S. EPA, it has been established that the Permittee has not released hazardous constituents from any solid waste management unit to the environment.

Issued this 20 th day of August, 1987

by _____
Basil G. Constantelos, Director
Waste Management Division

ATTACHMENT 1

WASTE ANALYSIS

WASTE ANALYSIS

Our waste inventory consists of 3 types of waste.

Type 1 is waste which is ignitable. It may or may not contain one or more or the following hazardous constituents as listed in CFR 40 261 Appendix VIII (Also Wis. DNR NR 181.16 Table VI). * They are Toluene, Methyl Ethyl Ketone, Isobutyl Alcohol and Benzene. Because of its ignitability it would fall into the D001 or the F003 categories. If one of the above listed constituents is present it would fall into the F005 category.

Through testing, this waste type shows insufficient recovery value. This is waste that will then be collected for shipment to a permitted treatment facility for incineration. This facility will perform the necessary analysis to insure conformance with its own permit conditions.

Type 2 is waste which is ignitable. It usually contains one or more of the above listed hazardous constituents. For the same reasons as type 1, type 2 would fall into the D001, F003, or F005 categories.

Through testing, this waste shows sufficient recovery value. This is waste that will be collected for shipment to a permitted recycling facility. This facility will perform the necessary analysis to insure conformance with its own permit conditions.

*These are the only Appendix VIII (Table VI) constituents that are reasonably expected to be present in types 1 and 2.

Type 3 is waste which consists solely of chlorinated solvents. It usually contains one or more of the following Appendix VIII (Table VI) hazardous constituents, Trichlorethylene, Tetrachloroethylene, Dichloromethane, or 111-Trichloroethane. This waste falls into the F001 category.

Through testing, this waste shows sufficient recovery value. This is waste that will be collected for shipment to a permitted recycling facility. This facility will perform the necessary analysis to insure conformance with its own permit conditions.

C-2 Waste Analysis Plan (answering C-2a,b,c,d, and e.)

Appendix 12 is a copy of our waste analysis plan which includes a copy of a "Sample Waste Analysis Report". Within this plan and profile report are the parameters and rationale for the analysis and the test methods used to accomplish the analysis. The frequency and procedures used to inspect incoming shipments from off-site have also been incorporated into the plan. All sampling is done in accordance with the methods as described in CFR 40 part 261 Appendix 1. (Also Wis DNR's NR 181.Appendix I.)

A. Dekas

WASTE ANALYSIS PLAN

Commerce only accepts waste from those generators who have become our customers by purchasing our raw materials. Our sales force gains first hand knowledge of the waste generation process before any waste is considered. It is by this method that we fortify the rationale of materials being reasonably expected to be present in a waste. That is because we are familiar with the generator's operations and with the materials which could be found within the generator's plant.

Commerce does not treat any waste on site. Therefore, the purpose of our analysis is to determine whether the waste we accept has sufficient recovery value to be sent for recycling or whether it must be sent for incineration. Also, unless already stated by the generator, our analysis determines the EPA (or DNR) hazard code. This is accomplished through the following steps:

1. Initial Sampling.

The first time a generator wishes to send waste to Commerce he sends in a sample of that waste along with a completed "Waste Sample Profile Report". This then becomes the representative sample for that generator's waste stream. Analysis on each generator's waste stream(s) will be repeated in accordance with 40CFR 264.13 (a)(3)(ii).

2. Sample Identification.

The sample is received along with the profile report. This sample is given a lab number which is the same as the date on which it was received. If more than one sample is received on a particular day, an alphabetic character follows the lab number. All samples are taken in accordance with CFR 40 part 261 Appendix 1 (EPA 600/2 80-018, Jan 1980). Also Wis. DNR's NR 181 Appendix I.

The generator may send a composite sample for analysis. However, if a problem is found with the composite sample, each drum will be sampled individually to determine within which drum the problem exists.

3. Initial Determine of Waste Type.

Based on the waste profile report submitted by the generator, an initial determination is made as to how the waste will be typed, should we decide to accept it. Four specific areas of the waste profile report are instrumental in making this decision. These areas are: "What is the name of the waste", "By what process is it generated", "Does the waste contain any...", and "Does this waste contain any EPA hazardous substances according to the Clean Water Act". These four areas form the basis and the rationale for our determining the waste types.

To clarify this, we look at each area individually:

What is the name of the waste? If the waste name is that of a listed Appendix VIII constituent, (or NR 181 Table VI) such as Toluene or 111 Trichloroethane, the waste is placed into type 2 or 3 respectively. However, if the waste is named by characteristic such as Combustible Liquid NOS or Flammable Liquid NOS, it is placed into type 1 and we go on to the next question.

By what process is it generated? If the process listed shows that the material comes in contact with any Appendix VIII constituents, the waste is placed into type 2 or type 3, depending upon what those constituents are. However, if the process listed is one where the waste does not come in contact with Appendix VIII constituents, for example, Mineral Spirits which is used to clean grease from metal parts, then none of the Appendix VIII constituents would reasonably be expected in the waste. Again, it is placed into type 1 and we go on to the next question.

Does the waste contain any...? If the section for halogens is the only one which is marked "yes", the waste is placed onto our type 3. If any other section is marked "yes", we reject the waste and alert the generator that he will have to find an alternate facility to handle his waste. However, if all sections are marked "no", it is placed into type 1 and we go on to the next question.

Does the waste contain any EPA hazardous substances according to the Clean Water Act? If the answer is "yes" and the materials listed are Appendix VIII constituents, the waste is placed into type 2 or type 3, depending upon the constituent. If the section is marked "yes", and the materials listed are not Appendix VIII constituents, or if this section is marked "no", it is placed into type 1.

4. Final Determination of Waste Through Analysis.

To verify the information submitted by the generator on the waste profile report, all waste stream samples will be analyzed for the organic compounds of Appendix VIII which are reasonably expected to be present.

Based on the nature of the businesses we service, the personal contact and knowledge we have of these businesses, and based on our records of their purchases, these constituents are: Dichloromethane, Tetrachloroethylene, Trichlorethylene, 111 Trichloroethane, Benzene, Isobutyl Alcohol, Methyl Ethyl Ketone and Toluene.

If the analysis shows that the sample has insufficient recovery value and has none of the chlorinated constituents listed above, it is placed in type 1.

If the analysis shows that the sample has sufficient recovery value and has none of the chlorinated constituents listed above, it is placed in type 2.

If the analysis shows that the sample consists solely of chlorinated constituents and has sufficient recovery value it is placed in type 3. If type 3 samples show insufficient recovery value, the waste stream is rejected and the generator is alerted that he will have to find an alternate facility to handle this waste stream.

If analysis shows that samples in type 1 or 2 show significant amounts of chlorinated constituents the waste stream is rejected and the generator is alerted that he will have to find an alternate facility to handle this waste stream.

Only those waste streams which meet our criteria will be accepted.

5. Method of Analysis.

All waste stream samples will be analyzed by the methods listed in EPA SW 846 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods", ASTM-D240-76, ASTM-D808-81, or ASTM-D482-80. To do this we will be using a Perkin Elmer Sigma 3 gas chromatograph equipped with flame ionization detector, Sigma 10 Data Station, and an electron capture detector add-on. The columns and accompanying apparatus used will be those specified in SW 846 for the particular constituents. All procedures, sampling and handling, and quality control will be performed according to SW 846.

6. Waste Verification.

When the waste itself is picked up, it is taken to a reception section of the hazardous waste storage area until it can be matched to the representative sample of the waste stream. Once this has been done the waste is assigned a spot in the storage area according to its type.

The tests described above for Appendix VIII constituents which could reasonably be present in the waste will be performed on a representative composite of all drums of each waste stream. This will be performed on each waste shipment we receive. If analytical tests do not match the shipment to the original waste stream sample, the drums will be checked individually. Those drums not matching the original waste stream sample will be returned to the generator.

7. Record Keeping.

Once the waste has been accepted and verified, the appropriate copies of the manifest are put together with the chromatograms, lab reports, and waste sample profile report. They are filed, alphabetically by generator, and kept in the operating record for a minimum of 3 years. The original waste stream sample is kept for 3 years.

An operating log indicating the date of shipment and quantity of drums of each type will be maintained. The operating log will also indicate the dates of shipment to another facility. A running balance of each type of waste stored in the containment will be maintained. The log will also indicate the dates of analytical verification, and whether manifest discrepancies existed.

ATTACHMENT 2

INSPECTION RECORDS

OPERATING LOG FOR TYPE

Appendix 41

* Note any discrepancies in manifest or analysis on back. Give disposition.

PREVIOUS BALANCE _____

DATE	MANIFEST NUMBER	# DRUMS REC'D	GENERATOR	DATE VERIFIED BY ANALYSIS	# DRUMS SHIPPED	TO	BALANCE

AREA/EQUIPMENT	SPECIFIC ITEM	TYPES OF PROBLEMS	FREQUENCY
Personal Equipment	Boots, gloves masks, goggles	Check for holes or leaks in boots in the packages of the masks. Clean Goggles.	Monthly or after each use.

MONTHLY INSPECTION LOG

Inspector's Name _____
Title _____
Date _____
Time _____

ITEM	TYPE OF PROBLEMS	STATUS OK	STATUS NOT OK	DATE AND NATURE OF REPAIR OR ACTION
Floor absorbent	Stock level			
Fire extinguisher 1	In its proper location			
Fire extingisher 2	In its proper location			
Protective clothing	Holes, wear and tear			
Security devices	Damage to fence or lock			
Organic respirators	Check for damage			
Overpack drums	Check availability			
Steam cleaning unit	Check operability			
Manual transfer pump	Check operability			

List specific problem on the back of this form along with the remedial action taken.

INSPECTION SCHEDULE

AREA/EQUIPMENT	SPECIFIC ITEM	TYPES OF PROBLEMS	FREQUENCY
Container Storage	Container placement	Check for aisle space and height of stacks.	Weekly
	Sealing of drums	Check for open drums and leakers.	Weekly
	Drum labels	Check for missing labels or missing information on labels. Check for improper labels.	Weekly
	Pallets	Check for broken or damaged boards.	Weekly
	Floor, dike, ramp, and sump	Check for cracks, deterioration or leaks.	Weekly
	Divider chain	Check for proper placement.	Weekly
Inventory	Drums	Check current total-should match running balance in operating log.	Weekly
Emergency Equipment	Floor absorbent	Check stock and placement of floor absorbent.	Monthly
	Pump & steam cleaner	Check operability	Monthly
	Fire extinguisher	Check placement Check recharging (done by outside service)	Monthly Yearly
	Overpack drums	Make sure two are always available.	Monthly
	Telephone	Check to make sure it's in working order.	Daily
	Fire alarm	Check for malfunctions.	Set nightly
Security Devices	Doors, fence,	Check for leaks or signs of deterioration. Check Check for damage or corrosion to links or locks.	Monthly
	Internal alarm	Check for operability.	Monthly
	Sprinkler system	Check for operability.	Yearly
	Warning signs	Check for proper placement.	Weekly

WEEKLY INSPECTION LOG

Inspector's Name_____
Title_____
Date_____
Time_____

ITEM	TYPE OF PROBLEMS	STATUS OK	STATUS NOT OK	DATE AND NATURE OF REPAIR OR ACTION
Container placement	Aisle space, height of stack			
Seals of drums	Open lids, leakers			
Drum labels	Missing or improper labels			
Pallets	Broken or damaged boards			
Floor, dike, ramp, sump	Cracks, Deterioration, or leaks			
Inventory	Discrepancies in count			Actual count:
Chain between types of waste	Check for proper placement			

List specific problem on the back of this form along with the remedial action taken.

YEARLY INSPECTION LOG

Inspector's Name _____
Title _____
Date _____
Time _____

In June of each year, check the following:

		STATUS		REMARKS
ITEM	WHAT TO CHECK	OK	NOT OK	DATE AND NATURE OF REPAIR OR ACTION
Fire extinguishers	Make sure the service company recharges them.			
Sprinkler system	Make sure the service company checks operability			

Attachment 3

PERSONNEL TRAINING

H-1a Job Titles

Appendix 23 is an overview of the organization of the organization of the hazardous waste program of Commerce Industrial Chemicals, Inc.

Appendix 24 is a list of job ititles and the names of the persons who fill these positions.

H-1b Content

Each Commerce Industrial Chemicals, Inc. employee initially attends a hazardous materials and waste management training/compliance seminar. This seminar, which is currently being given by the Transportation skills Program, is a comprehensive and extensive overview to current, new, and proposed regulations of the EPA, DOT, and OSHA, for handling of hazardous material, substances, and wastes.

Persons directly involved with the handling of hazardous wastes and materials are initially given a test to determine the extent of their knowledge of safe procedures and regulations. Areas of incorrect answers are then reviewed with the employee to ensure safe handling of the materials and compliance with the regulations Each employee has access to a semi-annually updated copy of CFR 40 and CFR 49. They also have access to an annually updated copy of Hazardous Materials, Substances, and Waste Compliance Guide, which references CFR 40 parts 117 and 260-265. Also CFR 49 parts 171 and 172. This an extremely comprehensive text, yet written in laymen's terms for easy understanding and compliance. Appendix 25 lists the table of contents for these publications.

Emergency coordinators all take part in formulating the contingency plan. A meeting is held every six months, or after the plan has been put to use, whichever is first, to evaluate the plan's performance and to make any necessary changes. Drills on the contingency plan are held to familiarize all personnel at the facility with the plan. Persons involved with any emergency equipment are trained in the use of that equipment.

Persons conducting inspections are trained to know the areas to be inspected and to understand the possible problems that can occur in those areas. Inspection logs are provided for the inspector to complete.

H-1c Trainer Qualification

Persons involved in training are the Head of the Waste Program, the Technical Director, and the Environmental Operations Manager. They have annually attended the Hazardous Materials, Substances, and Waste Management Training and Compliance seminar by given the Transportation Skills Program. Two have attended programs on "Industrial Solid and Hazardous Waste Incineration" and "Hazardous Waste Management Practices" conducted by the University of Wisconsin Extension, Department of Engineering and Applied Science. This along with many years of practical experience in the actual handling of hazardous materials and wastes provides a good basis for these trainers to implement training of others. The trainers will maintain their skill by continuing to attend classes or seminars which are relevant to hazardous waste management.

H-1d Relevance of Training

Persons involved directly with the handling of waste are given broad instruction in that area and limited instruction in the administrative area. Office personnel have limited instruction in all areas except their actions as instructed in the contingency plan. Appendix 26 is a chart which shows the relevance of training to a particular job.

H-1e Emergency Response

All personnel are instructed in their response to the contingency plan. Personnel directly invloved with the handling of the waste are trained to respond properly to emergency situations such as fire, explosion or spill.

H-2 Implementation

All personnel are currently trained in their respective areas. Upon receipt of the final permit, another session will be held with all personnel involved to ensure compliance with every aspect of that permit. Sessions will be held annually to maintain personnel skills. All areas of hazardous waste handling, storage, will be reviewed, noting any problems or changes which had occurred during the past year. Problem areas will be identified and discussed in order to form effective solutions. The contingency plan will be reviewed, noting any incidents which warranted the use of the plan and/or emergency action. We will focus on the cause of the incident and create steps which can be taken to prevent further incidents and insure better handling of such events in the future.

Records of training are kept in the operating record until closure for current employees and for 3 years from the date of an individual employee's termination for former employees.

ANY SPILL WITHIN THE DIKE

1. Collect all material at sump area and pump into approved drums.
2. Put drums into storage area.

MAJOR SPILL OF HAZARDOUS WASTE OUTSIDE OF DIKE-

1. If spill reaches sewer, notify sewage treatment plant immediately at 278-3958.

2. Remove any source of ignition. Ventilate area.

3. Attempt to contain spill if possible with Oil Dri using the protective clothing if necessary.

4. Notify Wis. DNR and the National Response Center. Also notify the fire department, and the City of Milw. Emer. Gov. Adm.

5. If clean up is not possible without help, contact AAA Environmental Services for clean up operation.

6. If necessary, evacuate personnel.

AFTER THE EMERGENCY

These requirements must be fulfilled.

1. All emergency equipment used must be cleaned and fit for use again.

2. All affected areas must be cleaned before resuming operation.

3. Notify the Wis. DNR and EPA that the facility has been cleaned and is once again in compliance.

4. Note in the operating record the date, time, and details of any incident which required this contingency plan.

5. Within 15 days after the incident, submit a written report to the Wis. DNR and the EPA including:

    a. Name, address, and phone of the owner/operator.
    b. Name, address, and phone of the facility.
    c. Date, time, and type of incident.
    d. Names and quantities of materials involved.
    e. The extent of any injuries.
    f. An assessment of actual or potential hazards to human health or the environment where applicable.
    g. Give the estimated quantity and disposition of any recovered material which resulted from the incident.

INJURY RESULTING FROM FIRE OR SPILL

1. During a fire, move injured person to the designated meeting area.

2. During a spill, move injured person outside to the fresh air.

3. Call the Fire Department at 347-2323.

4. Call St. Michael's Hospital at 263-8175, and alert them as to the nature of the person's injuries and the approximate arrival time.

NOTIFICATION REQUIREMENTS

Fire:	Milwaukee Fire Department	347-2323
Fire of haz. waste	City of Milwaukee Emergency Gov. Adm.	278-5503/464-7439
	Milwaukee Fire Department	347-2323
	Wis. DNR	1-608-266-3232
	National Response Center	1-800-424-8802
Major spill	City of Milwaukee Emergency Gov. Adm.	278-5503/464-7439
	Wis. DNR	1-608-266-3232
	National Response Center	1-800-424-8802
	Milwaukee Fire Department	347-2323
If spill reaches sewer	Milw. Sewage Treatment Plant	278-3958
	after hours:	271-2403
If spill reaches navigable waters	U. S. Coast Guard	291-3165
Injury	Fire Department	347-2323
	Paratech Ambulance	464-2020
	St. Michael's Hospital	263-8175

When calling Wis. DNR and National Response Center, have the following information ready:

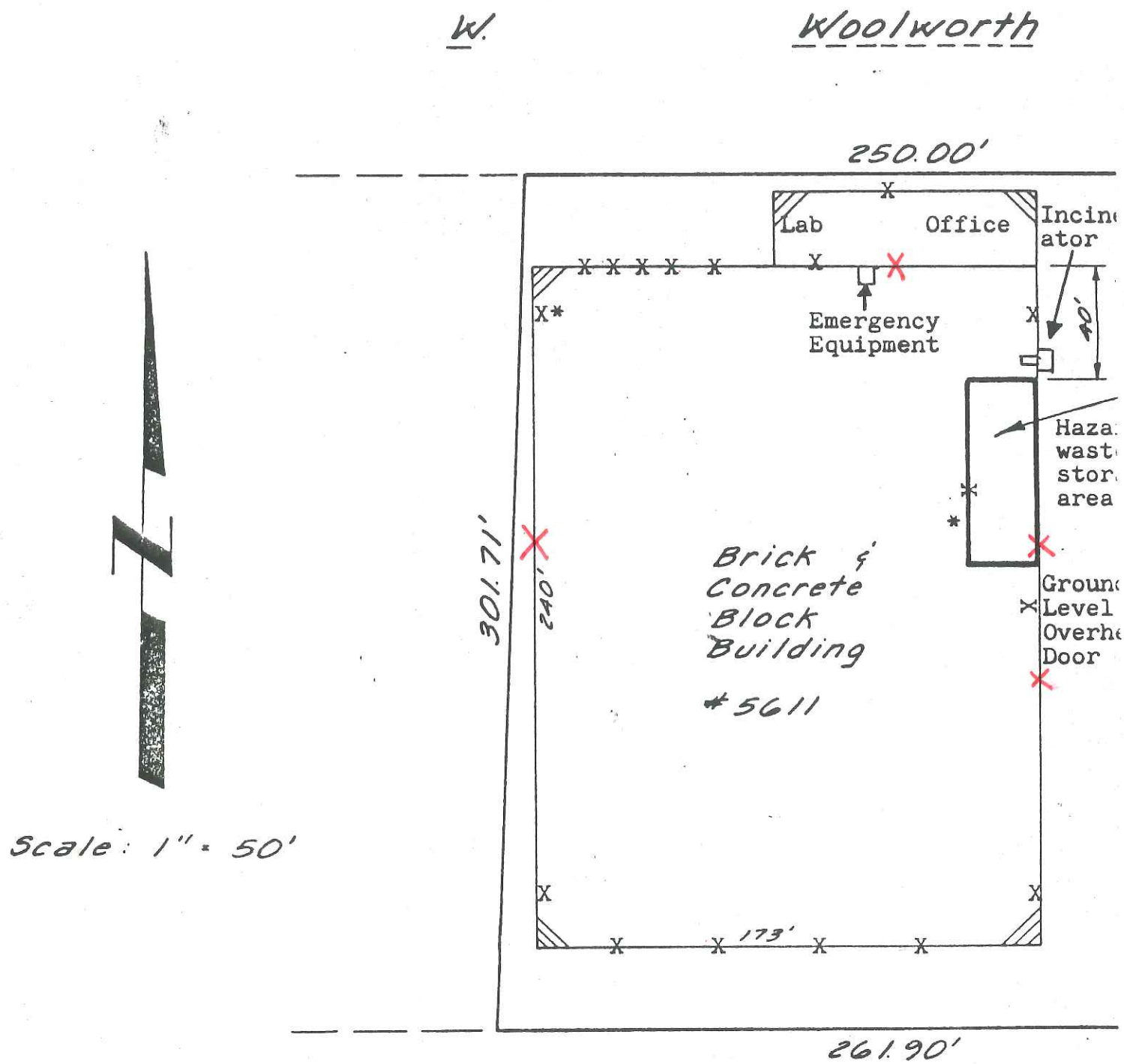
1. Your name and the phone from which you are calling.
2. The company name and address
3. The time and type of incident (fire, spill etc.)
4. Names and quantities of the materials involved to the best of your knowledge.
5. Extent of injuries if any.
6. The possible hazard to human health or the environment outside of the facility.

For help in clean up operations:

AAA Environmental Services	541-1440

KEY

X = Door or exit
* = Fire extinguisher



Scale: 1" = 50'

LOCATION MAP

OVERVIEW OF EMERGENCY RESPONSE

FIRE/EXPLOSION

Call Fire Dept. 347-2323

City of Milw. Emer. Gov. Adm. 278-5503 (office)
464-7439 (home)

If possible, contain or extinguish fire

Call Emergency Coordinator

Ronald Nellis 255-4547 or 226-9093
(Beeper)

Donald Michalski 774-8580

Fredric Michalski 321-0414

Harriet Pedersen 475-5344

Ralph Harpt 476-4078

Inform local, state, and federal agencies

Wis. DNR 1-608-266-3232
National Response Center 1-800 424-8802

INJURY

Call Fire Dept. 347-2323
Call ambulance 464-2020

Call St. Michael's
Hospital 263-8175

Call Emergency Coordinator

(see list under Fire/Expl.)

SPILL OR MATERIAL RELEASE

If possible, contain spill

Call emergency coordinator
(see list under Fire/Explosion)

Inform local, state, and federal agencies
(see list under Fire/Explosion)

If spill reaches sewer system

Call treatment plant 278-3958
After hours call 271-2403

If spill reaches navigable water

Call U.S. Coast Guard 291-3165

City of Milw. Emer. Gov. Adm.- 278-5503
(office)
464-7439
(home)

ATTACHMENT 4

CONTINGENCY PLAN

OF

COMMERCE INDUSTRIAL CHEMICALS, INC.
5611 W. WOOLWORTH AVE.
MILWAUKEE, WI 53218

OWNER/OPERATOR

DONALD J. MICHALSKI
P.O. BOX 206
JACKSON, WI 53037
414-677-7411

Our waste inventory consists of 3 types of waste.

Type 1 is waste which is ignitable. It may or may not contain one or more or the following hazardous constituents as listed in CFR 40 261 Appendix VIII (Also Wis. DNR NR 181.16 Table VI). * They are Toluene, Methyl Ethyl Ketone, Isobutyl Alcohol and Benzene. Because of its ignitability it would fall into the D001 or the F003 categories. If one of the above listed constituents is present it would fall into the F005 category.

Through testing, this waste type shows insufficient recovery value. This is waste that will then be collected for shipment to a permitted treatment facility for incineration. This facility will perform the necessary analysis to insure conformance with its own permit conditions.

Type 2 is waste which is ignitable. It usually contains one or more of the above listed hazardous constituents. For the same reasons as type 1, type 2 would fall into the D001, F003, or F005 categories.

Through testing, this waste shows sufficient recovery value. This is waste that will be collected for shipment to a permitted recycling facility. This facility will perform the necessary analysis to insure conformance with its own permit conditions.

*These are the only Appendix VIII (Table VI) constituents that are reasonably expected to be present in types 1 and 2.

Type 3 is waste which consists solely of chlorinated solvents. It usually contains one or more of the following Appendix VIII (Table VI) hazardous constituents, Trichlorethylene, Tetrachloroethylene, Dichloromethane, or 111 Trichloroethane. This waste falls into the F001 category.

Through testing, this waste shows sufficient recovery value. This is waste that will be collected for shipment to a permitted recycling facility. This facility will perform the necessary analysis to insure conformance with its own permit conditions.

These are the primary and alternate emergency coordinators.

Name	Address	Work	Home
Fredric Michalski	N68 W25967 Brighton Dr. Sussex, WI 53089	353-3630 Beeper	246-3174 226-9093

After hours dial 226-9093, wait for tone, state message and phone number. Fred Michalski will return the call.

Donald Michalski	PO Box 206 Jackson, WI 53037	353-3630	1-677-3276
Harriet Pedersen	1561 N. 51st St. Milwaukee, WI 53208	353-3630	475-5344
Ronald Nellis	20149 W. Good Hope Rd. Lannon, WI 53046	353-3630	255-4547
Ralph Harpt	2052 N. 84th St. Wauwatosa, WI 53226	353-3630	476-4078

If Donald Michalski is on site, being the owner/operator, he will immediately assume responsibility of determining whether or not this contingency plan must be implemented. If he is not on site, the highest listed person who is on site will assume this duty.

If necessary, he will then proceed with evacuation and notification of the proper authorities.

The procedures described within this contingency plan will be carried out by one of these designated coordinators only.

EMERGENCY EQUIPMENT

The building is equipped with an automatic sprinkler system and alarm bell. This system is connected to Honeywell Protection Services 24 hours/day. Smoke detectors are located throughout the building.

The following is located at the designated "Emergency Equipment Area" which is located at the north end of the warehouse near the office access door.

1. Two open head drums of Oil Dri to absorb spilled material.
2. One shovel.
3. Two pair of protective boots, fire fighter type.
4. Two pair of protective gloves.
5. Two pair of splash proof goggles.
6. Two organic respirators.
7. Two empty openhead drums for the disposal of contaminated Oil Dri.
8. Two over pack drums in the event of severely leaking drums.

Located around the warehouse:

1. One 20 pound ABC type fire extinguisher is located at the northwest corner of the building on the wall inside the west door.
2. One 20 pound ABC type fire extinguisher is located at the entrance to the hazardous waste storage area which is in the east section of the building.

These fire extinguishers are maintained under agreement with the Automatic Fire Protection System Corp. 3265 N. 126th St. Brookfield, WI 53005.

The following equipment is available for emergency use:

1. One manual transfer pump.
2. One portable steam cleaning unit.

EVACUATION PLAN

All persons in the office at the time of an emergency shall leave through the front door.

All persons in the warehouse at the time of an emergency shall leave through any one of the 19 doors located evenly throughout the warehouse.

All persons shall then meet for a head count on 56th street at Mill Rd. It is at this location that the emergency coordinator will wait for local, state, or federal authorities to give any assistance in the control of the emergency.

No one shall return to the building unless authorized by the emergency coordinator or unless the all clear has been given by the emergency coordinator.

A list of employees will be in the operating record to aid the emergency coordinator the head count.

FIRE IN THE GENERAL WAREHOUSE

1. Evacuate all personnel.

2. Notify fire dpartmnt at 247-2323, City of Milwaukee Emergency Government Adm-, 278-5503 (office), 464-7439 (home).

3. Note location of fire so tht when the fire department arrives you can help them determine the best plan of attack.

4. If possible, make sure the door to the hazardous waste area is closed and shut off electrical system.

5. If possible, obtain the hazardous waste operating records from the safe and then close the safe.

6. Leave the building and wait at the designated area for the fire department.

7. Take a head count of all personnel.

8. Notify proper authorities if the hazardous waste storage area becomes involved and there is a threat to human health or to the environment.

FIRE IN THE HAZARDOUS WASTE STORAGE AREA

1. Evacuate all personnel.

2. Notify the fire department at 347-2323, and City of Milwaukee Emergency Adm., 278-5503 (office), 464-7439 (home).

3. If possible, make sure the door to the hazardous waste storage area is closed.

4. If possible, obtain the hazardous waste operating records from the safe and then close the safe.

5. If possible, shut off the electrical system.

6. Leave the building and take a head count of the personnel at the designated meeting area.

7. From another phone, notify the Wis. DNR at 1-608-266-3232 and the National Response Center at 1-800-424-8802, and the City of Milwaukee Emergency Goverment Administration at 278-5503-office, 464-7439-home.

8. Return to the designated meeting area and wait for the fire department.

SMALL SPILL OF HAZARDOUS WASTE OUTSIDE OF DIKE

1. Get Oil Dri from designated emergency area and contain spill. Use protective gloves and boots and breathing apparatus if necessary. Open doors and windows to ventilate area.

2. Remove any source of ignition.

3. Gather contaminated Oil Dri and put into the empty drums provided.

4. Properly label drums and put into the hazardous waste storage area.

5. Clean all equipment used and return it to the designated emergency area.

6. Arrange for disposal of contaminated Oil Dri.

ATTACHMENT 5

CLOSURE PLAN

I-1a,bc,d,e&f Closure Plan

Appendix 27 is a copy of our approved closure plan which covers the information requested in these sections. It lists, in steps, the actions necessary for closure of this facility at the end of its intended operating life. If there are any changes in our operation which would affect the closure plan or cost estimate, an amendment will be made to plan and submitted to the Regional Administrator and the Wisconsin Department of Natural Resources (WDNR) for approval and possible permit modification. This plan and any amendments will be kept on file at the facility until the certification of closure completeness has been accepted by the EPA and Wis. DNR, and the certification by an independent registered professional engineer that the facility is closed has been submitted to the EPA and Wis. DNR.

I-3 Notice in Deed and Notice to Local Land Authority

This facility is not a disposal facility therefore, notation is not necessary in the deed informing potential purchasers of restrictions associated with a disposal site as required by CFR 40 part 264.120.

I-4 Closure Cost Estimate

An estimated $9413.50 (January 1984 cost estimate) will be needed to close this hazardous waste facility. The closure costs are attached to the closure plan in Appendix 27. Costs include removal of waste inventory, decontamination, disposal of wash waters, and closure certification.

These estimates were made as follows:

Removal of inventory The maximum inventory we would have at the time of closure is 396 drums. Disposal cost is based on a quote from Hamilton Industries at Two Rivers, WI of .35c gal for incineration of this material. A copy of this quote is attached. Freight costs and labor for the loading of the drums are also listed in this estimate.

Decontamination of storage area Once the drums have been removed, the storage area will be steam cleaned, generating an estimated two drums of waste water and residue. Should this waste water be hazardous, it will be included in the final shipment of waste inventory being shipped for disposal.

If laboratory analysis of generated waste water shows no evidence of contamination, and only if the waste water will meet City of Milwaukee sewer use ordinance pretreatment standards, the waste water and residue in these drums will be discharged to the sewer system.

Closure Certification The cost of closure by a professional engineer is estimated on the basis of $30.00 per hour at an estimated two hours.

This closure cost estimate will be kept on file and annually, from the date of original development, be revised to reflect changes in closure cost brought about by inflation. The Department of Commerce's Annual Implicit Price Deflator for Gross National Product will be used to make this adjustment. It will also be revised any time a change in the closure plan affects the cost of closure. The Regional Administrator and the Wis. DNR will be notified of any change.

I-5 Financial Assurance Mechanism for Closure

We have established an Irrevocable Letter of Credit through the M&I Marshall & Ilsley Bank in Milwaukee, WI, in the amount of $10,375.00 which is our closure cost estimate adjusted by the Implicit Price Deflator for Gross National Product. The beneficiary is the State of Wisconsin Department of Natural Resources. This letter of credit is valid for one year and will be automatically extended each year unless we are notified 90 days prior to the current expiration date. Appendix 28 is a copy of this Letter of Credit.

I-6 and I-7 Post Closure Cost Estimate and Financial Assurance

Since all wastes will be shipped off site for disposal, there will be no post closure activities or costs.

I-8a Liability Insurance for Sudden Occurrences

Our existing liability insurance policy is currently being amended to include the Hazardous Waste Facility Liability Endorsement as specified in CFR 40 part 264.147. It will include liability coverage for sudden and accidental occurrences in the amount of $1 million per occurrence with an annual aggregate of $2 million exclusive of legal defense costs. Appendix 39 is a copy of our existing policy with the amendment attached.

I-8e Adjustment Procedures

If the Regional Administrator increases the amounts of liability coverage or elects to improve nonsudden liability coverage requirements, we will seek an adjustment to the insurance policy discussed above.

I-9 State Assumption of Responsibility

We will not request state assumption of the legal or financial responsibilities.

This closure plan addresses all the steps that will be necessary to close this facility at the end of its intended operating life. A post closure plan is not required because this is not a disposal facility and all wastes will be removed at closure. Also, as we do not store waste in tanks, surface impoundments, or landfills, nor do we treat by the process of land treatment, thermal treatment, or chemical, physical, or biological treatment, these items are not addressed in this plan.

This closure plan was designed to ensure that the facility will not require further maintenance and controls. It minimizes or eliminates threats to human health and the environment, and it avoids escape of hazardous waste or hazardous waste consitituents. The following sections discuss, in detail, efforts to be made at Commerce Industrial Chemicals, Inc. to satisfy the closure performance standard.

Step 1

Current estimate of closure would be in 15 year from issuance of this permit. We intend to continue storing and treating waste throughout the existence of the corporation, therefore, at the expiration of the permit, a review will be made as to whether or not we will seek extension of the permit.

At the actual time of closure, however, we will, within 60 days after receiving the final volume of waste, treat or remove from the site, all hazardous wastes in accordance with this plan. The Regional Administrator will be notified by Commerce at least 180 days before the beginning of final closure. The Wis DNR will be notified at least 120 days before the beginning of final closure.

Step 2

The maximum inventory we could have at one time is 396 drums. At the time of closure, if we were at our maximum, we estimate it would take approximately 75 days to send all drums off site for incineration. (That is approximately two 80 drum truckloads per month). Once the waste is offsite, the decontamination of the drum storage would take approximately 1/2 day. We do not anticipate needing an extension of the allowed time.

Step 3

Following waste removal, the container storage area will be decontaminated by a series of stream cleaning operations, using the portable steam cleaning unit which is company owned. All waste water and residue generated will be collected at the sump are and pumped into 17E steel drums. The material will be analyzed at once. If the laboratory analysis indicates that the waste water is hazardous, it will be sent off site with all the other stored waste. If the analysis shows no evidence of contamination, and only if the waste water will meet City of Milwaukee sewer use ordinance pretreatment standards, the waste water and residue in these drums will be discharged to the sewer sytem.

Step 4

A professional engineer will be called upon to certify that all drums of hazardous waste have been removed and that the drum storage area has been decontaminated.

Step 5

This closure plan will be kept on file along with any revisions to the plan until certification of closure completeness has been submitted and accepted by the USEPA Region V and the Wis. DNR.

Attached is the closure cost estimate which is calculated at 1984 dollar value. This closure cost estimate will be kept on file and revised whenever a change in the closure plan affects the cost of closure. It will be adjusted annually from the date of its original development to reflect changes in closure cost brought about by inflation. The Department of Commerce's Annual Implicit Price Deflator for Gross National Product will be used to make this adjustment.

Our financial responsibility will be met by the means of an irrevocable letter of credit issued by the Marshall & Ilsley Bank, Box 2035 Milwaukee, WI 53201.

The Regional Administrator and the Wis. DNR will be notified of any adjustments in the closure cost.

1. WASTE MATERIALS. During the term of this Agreement, Generator will provide to Disposer the chemical composition and physical characteristics of which materials are described in the "Generator's Waste Material Profile Sheet", attached hereto, marked Exhibit "A", and incorporated herein.

2. DISPOSER SERVICES. Disposer agrees to provide Generator the disposal of the described waste materials, in a manner permitted by law, at the following facility: Hamilton Industries, 1316 - 18th Street, Two Rivers, Wisconsin 54241.

3. FEES AND BILLING. For those services provided by Disposer, Generator will pay Disposer a fee as follows:

$0.35 per gallon if delivered in 55 gallon drums.

$0.30 per gallon if delivered in bulk.

All materials delivered with freight prepaid to our facility.

CLOSURE PLAN

OF

COMMERCE INDUSTRIAL CHEMICALS, INC.
5611 W. WOOLWORTH AVE.
MILWAUKEE, WI 53218

OWNER/OPERATOR

DONALD J. MICHALSKI
7033 W. WELLS ST.
WAUWATOSA, WI 53213

414 774-8580

CLOSURE COST ETIMATE*

1. Removal of Final Waste Inventory	
a. Disposal cost (396 drums of various solvents = $19.25/drum	7,623.00
b. Warehouse labor (12 hours @ $12.00/hour)	144.00
c. Administrative costs	250.00
c. Hauling (5 trips @ $250.00/trip)	1,250.00
Subtotal	9,267.00
2. Decontamination of drum storage area	
a. Disposal of decontaminated washes 2 drums @ 19.25/drum)	38.50
b. Labor 4 hours @ $12.00/hour)	48.00
Subtotal	$86.50
3. Closure Certification	
a. Labor (P.E. 2 hours @ $30.00/hour	60.00
Subtotal	60.00
Total Closure Cost	9,500.00
	86.50
* 1984 Dollars	$9,413.50

Irrevocable Letter of Credit

M&I Marshall & Ilsley Bank
International Banking Department
[illegible]orth Water Street
[illegible]aukee, Wisconsin 53201

NON-NEGOTIABLE COPY

Telephone: 414 765-768[illegible]
Cable Address MARIL
Telex: 0269572 MARIL

☐ This is a confirmation of the credit opened by brief wire advice under even date.
☐ This is a confirmation of the credit opened by wire under even date.

Date of Issue: February 1, 1983

Issuing Bank's Credit No.: SB 805

Advising Bank's Credit No.:

Advising Bank:

Applicant: Commerce Industrial Chemicals, I
5611 W. Woolworth Ave.
Milwaukee, WI 53218

Beneficiary: State of Wisconsin
Department of Natural Resources
Box 7921
Madison, WI 53707

Maximum Amount: US$10,375.00

[illegible] Expiry d.
at our counters: February 1, 1984

We hereby issue this Irrevocable Letter of Credit in your (The Beneficiary's) favor which is available against your drafts at ---------sight---------- drawn on M&I Marshall & Ilsley Bank, Milwaukee, Wisconsin bearing the clause: "Drawn under M&I Marshall & Ilsley Bank Credit No. [illegible] SB 805 " accompanied by the following documents:

- A signed Beneficiary's statement declaring that, "the amount of the draft is payable pursuant to regulations issued under the authority of Section NR 180.15 or Section 181.42(10), Wisconsin Administrative Code, as amended."

Whereas the customer owns a solid waste land disposal or hazardous waste facility named CIC Inc. located in Section 26, Township 8N, Range 21E, City of Milwaukee, Milwaukee County, Wisconsin, and that facility is subject to either the closure requirements of the plan of operation approval issued by the Beneficiary, dated the _____ day of _____, 19___ and any amendments thereto or the closure requirements of Sections NR 181.42(8) and 181.44(12) and (13), Wisconsin Administrative Code, whichever is applicable to th facility.

This Letter of Credit is written to provide proof of financial responsibility pursuant to Section 144.443, Wisconsin Statutes, and Section NR 180.15 or NR 181.42(10), Wisconsin Administrative Code, to ensure compliance with the closure requirements of the plan of operation approval and any amendment thereto or the closure requirements in Section 181.42(8) and 181.44(12) and (13), Wisconsin Administrative Code, whichever is applicable, and shall inure to the benefit of the beneficiary.

☐ Documents must be presented to negotiating or paying bank within _____ days of issuance of documents evidencing shipment or dispatch or taken in charge (shipping documents) but within validity of Letter of Credit.

Shipment from / To	Partial Shipments	Transhipments

Special Conditions:

Continued on Page Two which forms an integral part of the Letter of Credit.

The negotiating bank must forward all original documents by airmail unless otherwise instructed direct to M&I Marshall & Ilsley Bank, Milwaukee, Wisconsin 53201 Attention International Banking Department.

[illegible]

M&I Marshall & Ilsley Bank

Authorized Signature – Issuing Bank

Indications of Advising Bank

Appendix 28

Place, Date, Name, and Signature of Advising Bank

Cable Letter of Credit

Marshall & Ilsley Bank
national Banking Department
J North Water Street
Milwaukee, Wisconsin 53201

Telephone: 414 765-7680
Cable Address MARIL
Telex: 0269572 MARIL - M

PAGE TWO which forms an integral part of our Credit SB 805

☐ This is a confirmation of the credit opened by brief wire advice under even date. ☐ This is a confirmation of the credit opened by wire under even date. Date of Issue	Issuing Bank's Credit No.	Advising Bank's Credit No.
Advising Bank	Applicant	
Beneficiary	Maximum Amount Latest Date for Negotiation (In Country of Beneficiary)	

We hereby issue this Irrevocable Letter of Credit in your (The Beneficiary's) favor which is available against your drafts at _____ drawn on M&I Marshall & Ilsley Bank, Milwaukee, Wisconsin bearing the clause: "Drawn under M&I Marshall & Ilsley Bank Credit No. IM_____" accompanied by the following documents:

This Letter of Credit is effective as of February 1, 1983, and will expire on February 1, 1984, but such expiration date will be automatically extended without amendment for a period of at least oneyear on February 1, 1984, and on each successive expiration date, unless, at least 90 days before the current expiration date, we notify the beneficiary and Commerce Industrial Chemicals, Inc. Milwaukee WI by certified mail that we have decided notto extend the Letter of Credit beyond the current expiration date. In the event that the Beneficiary is so notified, any unused portion of the credit will be available upon presentation of a sight draft for 90 days after the date of receipt as shown on the signed return receipt, unless other proof of financial responsibility acceptable to the beneficiary is provided to the beneficiary.

Notwithstanding the automatic renewal clause above, the Letter of Credit will have a final expiration date of February 1, 1993, upon which date this Letter of Credit becomes null and void.

We agree that drafts drawn in accordance with the terms stipulated will be duly honored upon presentation and delivery of documents as specified if presented on or before February 1, 1984, or any extended expiry date, the final expiry date being February 1, 1993.

☐ Documents must be presented to negotiating or paying bank within_____ days of issuance of documents evidencing shipment or dispatch or taken in charge (shipping documents) but within validity of Letter of Credit.

Shipment from To	Partial Shipments	Transhipments

Special Conditions:

The negotiating bank must forward all original documents by airmail unless otherwise instructed direct to M&I Marshall & Ilsley Bank, Milwaukee, Wisconsin 53201 Attention International Banking Department.

[illegible] and/or bona fide holders that drafts drawn [illegible] in accordance [illegible] with the terms of this credit will be duly [illegible].

M&I Marshall & Ilsley Bank

Authorized Signature — Issuing Bank

Indications of Advising Bank

Place, Date, Name, and Signature of Advising Bank

This credit will be subject to the Uniform Customs and Practice for Documentary Credits of the International Chamber of Commerce, in effect on the date of issuance.

Attachment 6

Revised Part A

WID 980795181

FORM 3 RCRA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER: F W I D 9 8 0 7 9 5 1 8 1

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facil revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your fa EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

☒ 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*: 48 10 01

☐ 2. NEW FACILITY *(Complete item belo*

FOR NEW FACI PROVIDE THE (yr., mo., & day) TION BEGAN O EXPECTED TO

B. REVISED APPLICATION *(place an "X" below and complete Item I above)*

☒ 1. FACILITY HAS INTERIM STATUS

☐ 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

A. PROCESS CODE – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provide entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. PROCESS DESIGN CAPACITY – For each code entered in column A enter the capacity of the process.

1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR OR GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S02	600	G	
X-2	T03	20	E	
1	S01	21,800	G	
2				
3				
4				

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	OF
5				
6				
7				
8				
9				
10				

...tinued from page 2.

TE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)

H W | I | D | 9 | 8 | 0 | 7 | 9 | 5 | 1 | 8 | 1 | | | 1

FOR OFFICIAL USE ONLY

H W | DUP | 2 | DUP

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	D 0 01	396,000	P	S01	
2	F 0 01	12,000	P	S01	
3	F 0 02	12,000	P	S01	
4	F 0 03	88,000	P	S01	
5	F 0 05	100,000	P	S01	
6	K 0 86	100	P	S01	
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

CONTINUE ON REVERS

...inued from the front.

...SCRIPTION OF HAZARDOUS WASTES (continued)

E. ... THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. (enter from page 1)

F W I D 9 8 0 7 9 5 1 8 1 6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail)*.

VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground-level)* that clearly delineate all existing structures; existing storage, treat...t and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail)*.

VII. ...CILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)	LONGITUDE (degrees, minutes, & seconds)
8 8 5 8 1 5	4 3 0 8 0 0

VIII. FACILITY OWNER

[X] A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

[ ] B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

C.	1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. (area code & no.)

D.	3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
Do... ld J. Michalski		4-23-84

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED

ATTACHMENT 7

SPECIFIC REQUIREMENTS FOR CONTAINERS

D-1a Containers with Free Liquid

The section of our facility which is designed for facility which is designed for hazardous waste storage is an area 65 feet by 22 feet, or 1, 430 square feet. This area is located inside the brick building along the east wall approximately 40 feet from the north wall and meets the requirements for the 50 foot buffer zone. This area is kept free of ignition sources such as sparks or open flame. Warning and no smoking signs are posted on the doors to this area. Appendix 13 is the floor plan which was drawn and certified by a professional engineer. The maximum number of drums stored in this area would be 396. All drums would contain free liquids. All waste materials are compatible. Because the number of drums in each waste type is constantly changing, movable chains will be used to separate each type. This separation will eliminate the possibility of sending incorrect material for reclaiming. Each chain will note the waste types it separates.

D-1a1 Primary Containment Devices

All contianers are metal 55 gallon drums constructed of 18 gage steel to meet DOT spec. 17E. None of the materials stored in these drums requires a lining. If a leak develops in a drum, the material will either be transferred to another drum in good condition, or the entire drum will be put into an overpack drum.

D-1a2 Container Management Practices

Prior to transfer of drums to the storage area, they are checked for proper seal and labels. They are classified according to waste type. Following the intiial determination, wastes may be reclassified. If they have been reclassified, they are sent to the appropriate area. Changes are made accordingly in the operating log. Drums are palletized and taken to the storage area by forklift truck. The pallets elevate them from contact with free standing liquids, should a leak occur. The maximum storage height is 3 drums. A 2 foot aisle space is maintained for regular inspection purposes. Inspections of the containers and containment area will be carried out according to the inspection schedule. Drums are stored in a manner that will not cause them to leak or rupture.

D-1a3a,b,c, and d Secondary Containment System

The container storage will be surrounded by a 4 inch concrete curb on three sides and 3 inch concrete curb in front. This front curb will be ramped for access by forklift. This curb will provide a holding capacity of 2,681 gallons which exceeds the 10% which is required. The calculations for this figure are found on Appendix 13. The base material is concrete and will be regularly inspected to ensure that it remains impervious to liquids and in generally good condition. As previously mentioned, drums are stacked on pallets to prevent direct contact with free standing liquids. Run on is not a factor since the drums are stored inside.

D-1a4 Removal of Liquids from Containment system

There will be a 2 foot sump area in the southeast corner of the storage area. Pumping of any spilled or leaking material would be done here with a manual transfer pump. The material would be pumped into 17E 55 gallon steel drums and returned to the storage area. Appendix 14 gives the specifications of this pump.

D-1b Containers Without Free Liquid

We do not storeg containers without free liquids therefore sections D-1b (1)(2)(3), and (4) are not applicable.

Operating Log

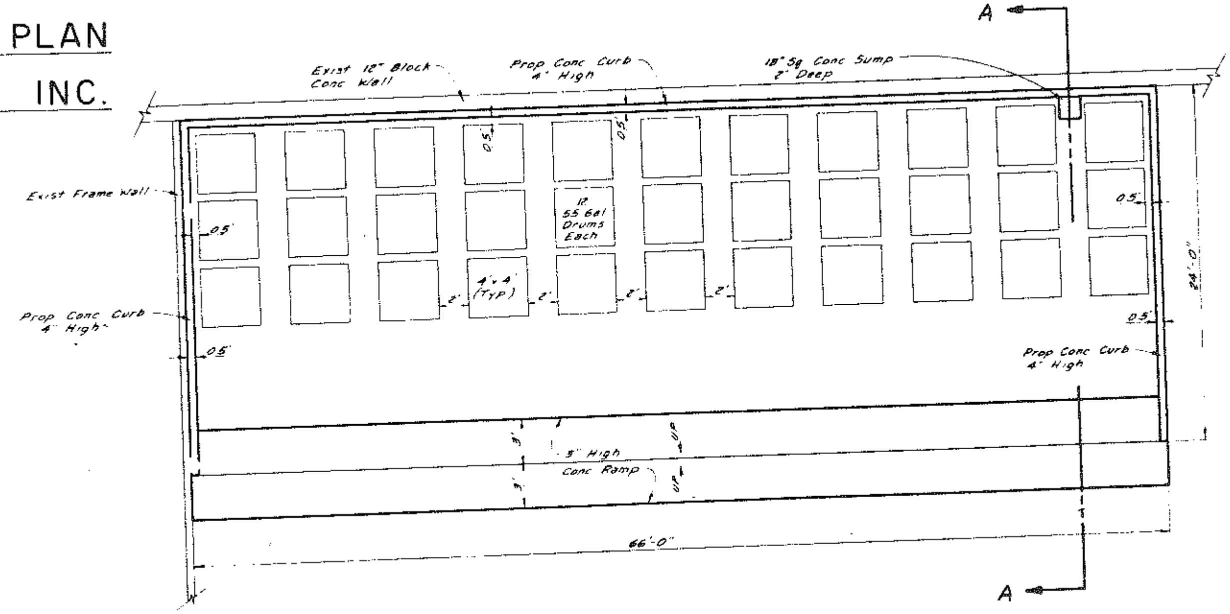
An operating log indicating the date of shipment and quantity of drums of each type will be maintained. This will allow CIC to keep a running balance on number and type of drums in the storage area. The operating llog will also indicate the dates of shipment of hazardous wastes to another HWM facility, the dates of analytical verification, and whether manifiest discrepancies existed. Appendix 41 is a copy of this log.

HAZARDOUS WASTE CONTAINMENT PLAN

COMMERCE INDUSTRIAL CHEMICALS INC.

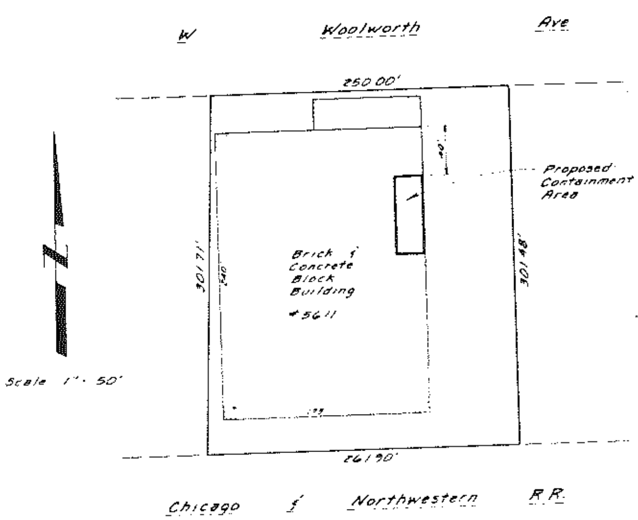
5611 W. WOOLWORTH AVE.
MILWAUKEE, WISC. 53218

Appendix 13

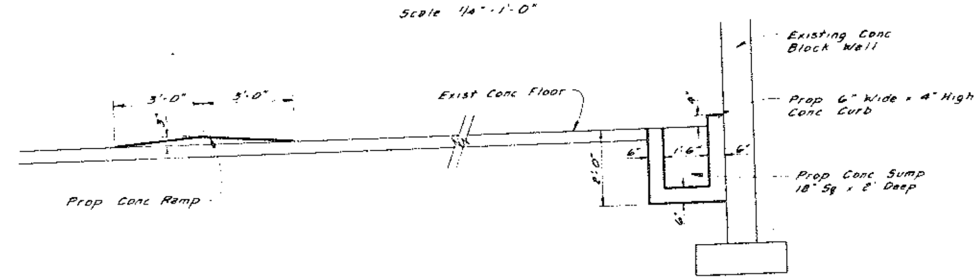


PLAN

Scale 1/4" = 1'-0"



LOCATION MAP



SECTION A-A

Scale 1/2" = 1'-0"

DESIGN DATA

Containment Volume Req'd = 10% of Storage Volume
10% of 396 - 55 Gal Drums = 2178 Gal

Containment Volume Proposed:
Area = 65.0 x 22.0 = 1430.0 SF
Volume = 1430.0 x 0.25 = 357.5 CF = 2,681 Gal

R. A. Smith & Assoc. Inc.
MUNICIPAL-INDUSTRIAL-SANITARY-CIVIL ENGINEERS SURVEYORS
PH. (414) 786-1777

CITY OF MILWAUKEE
COMMERCE INDUSTRIAL CHEMICALS INC.
HAZARDOUS WASTE CONTAINMENT PLAN

SCALE AS SHOWN | JOB NO. 10482 | DATE 9-27-82
DESIGNED BY P.A.J. | DRAWN BY T.J.T. | CHECKED BY P.A.J.
REVISED 11-23-87
SHEET 1 OF 1

PUMP SPECIFICATIONS

This pump is a rotary pump model 1000 from National Spencer Inc.

It is self priming, vane type.

It adapts to 15, 30, or 55 gallon drums.

It has a 3/4" discharge spout with hose.

It has a discharge rate of approximately 1 gallon per 16 revolutions.

This pump is manually operated.

1982/83 HAZARDOUS MATERIALS/
WASTE COMPLIANCE GUIDE

Table of Contents

PART 264
STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE & DISPOSAL FACILITIES

Subpart A — General

Subpart B — General Facility Standards

Subpart C — Preparedness and Prevention

HAZARDOUS WASTE MANAGEMENT GUIDE

Subpart D — Contingency Plan and Emergency Procedures

Subpart E — Manifest System, Recordkeeping, and Reporting

HAZARDOUS WASTE MANAGEMENT GUIDE

Subpart G — Closure and Post-Closure

Subpart H — Financial Requirements

Subpart I — Use and Management of Containers

RELEVANCE OF TRAINING

JOB TITLE	PERSONAL SAFETY	RELEASE PREVENTION AND RESPONSE	CONTINGENCY PLAN	EMERGENCY PROCEDURES	HAZ. WASTE MGT. PRACTICES	RECORD KEEPING	WASTE HANDLING
Head of Program	B	B	B	B	B	B	B
Emer. Coordinators	B	B	B	B	B	L	B
Env. Operation Mgr.	B	B	B	B	B	L	B
Technical Director	B	B	B	B	B	B	B
Lab Chemist	B	B	B	B	B	B	B
Warehouse men	B	B	L	L	L	L	B
Drivers	B	B	L	L	L	L	B
Office Personnel	L	L	L	L	L	L	L

B= Broad Instruction

L= Limited Instruction

Summary of Basis for Permit Conditions

This section of the fact sheet provides a brief summary of the permit conditions in the draft permit and their basis. All citations of the regulations refer to the regulation as codified in Title 40 of the Code of Federal Regulations (40 CFR).

1. General Permit Conditions

Permit conditions I.A to I.H are regulatory requirements of 40 CFR Parts 270. These conditions are of a general nature and are applicable to all Hazardous Waste Management Facilities regulated pursuant to an U.S. EPA RCRA permit.

Standard Permit Conditions	Subject	Basis (40 CFR)
I.A	Effect of Permit	§270.4 §270.30(g)
I.B	Permit Actions	§270.30(f) §270.41 §270.42 §270.43
I.C	Severability	§270.32(a)
I.D.1	Duty to Comply	§270.30(a)
I.D.2	Duty to Reapply	§270.51
I.D.3	Permit Expiration	§270.30(b) §270.10(h)
I.D.4	Need to Halt or Reduce Activity Not a Defense	§270.30(c)
I.D.5	Duty to Mitigate	§270.30(d)
I.D.6	Proper Operation and Maintenance	§270.30(e)
I.D.7	Duty to Provide Information	§270.30(h)

Standard Permit Conditions	Subject	Basis of (40 CFR)
I.D.8	Inspection and Entry	§270.30(i)
I.D.9	Monitoring and Records and Retention of Records	§270.30(j)
I.D.10	Notices of Planned Physical Facility Changes	§270.30(l)(1)
I.D.11	Certification of Construction	§270.30(l)(2)
I.D.12	Anticipated Noncompliance	§270.30(l)(2)
I.D.13	Transfer of Permits	§270.40 §270.30(l)(3) §264.12(c)
I.D.14	Compliance Schedules	§270.33
I.D.15	Twenty-four Hour Reporting of Hazardous Noncompliance	§270.30(l)(6) §264.56
I.D.16	Other Noncompliance	§270.30(l)(10)
I.D.17	Other Information	§270.30(l)(11)
I.E	Signatory Requirement	§270.11 §270.30(k)
I.F	Confidential Information	§270.12
I.G	Documents to be Submitted	§270.14(b)(2) §270.14(b)(3) §264.16(d) §264.37 §264.52 §264.143 §264.147
I.H	Documents To Be Maintained At Facility Site	§264.13(b) §264.53(a) §264.112(a) §264.142(a) §264.16(d) §264.73 §264.15(b)

2. General Facility Conditions

The conditions II.A to II.R are regulatory requirements of 40 CFR Part 264, Parts B, C, D, E, G, and H. Again, these conditions are of a general nature in that they are applicable to all facilities which treat, store, or dispose of hazardous waste pursuant to an U.S. EPA RCRA permit.

Permit Conditions	Subject	Basis of (40 CFR)
II.A	Design and Operation of Facility	§264.31
II.B	Required Notice	§264.12
II.C	General Waste Analysis	§264.13
II.D	Security	§264.14
II.E	General Inspection Requirements	§264.15
II.F	Personnel Training	§264.16
II.G	General Requirements for Ignitable, Reactive, or Incompatible Waste	§264.17
II.H.1	Required Equipment	§264.32
II.H.2	Testing and Maintenance of Equipment	§264.33
II.H.3	Access to Communication or Alarm System	§264.34
II.H.4	Required Aisle Space	§264.35
II.H.5	Arrangements with Local Authorities	§264.37
II.I.1	Contingency Plan Implementation	§264.51
II.I.2	Copies of Plan	§264.53
II.I.3	Amendment of Contingency Plan	§264.54
II.I.4	Emergency Coordinator	§264.55
II.J	Manifest System	§264.70

Permit Conditions	Subject	Basis (40 CFR)
II.K.1	Operating Record and Availability, Retention, and Disposition of Records	§264.73 §264.74
II.K.2	Biennial Reports	§264.75
II.L.1	Closure Performance Standard	§264.111
II.L.2	Amendment of Closure Plan	§264.112(b)
II.L.3	Notification of Closure	§264.112(c)
II.L.4	Time Allowed for Closure	§264.113(a)
II.L.5	Disposal or Decontamination of Equipment	§264.114
II.L.6	Certification of Closure	§264.115
II.M	Cost Estimate for Facility Closure	§264.142
II.N	Financial Assurance for Facility Closure	§264.143
II.O	Liability Requirement	§264.147
II.P	Incapacity of Owners or Operators, Guarantors, or Financial Institutions	§264.148
II.Q	Waste Minimization	§264.73(b)(9)
II.R	Compliance Schedule	*

* The Permitee is currently in compliance with condition II.O.

3. Containers

Conditions III.A to III.H are specific to containers and implement the regulatory requirements of 40 CFR Part 264, Subpart I, Sections 264.170 to 264.178.

Specific Permit Conditions	Subject	Basis (40 CFR)
III.A	Waste Identification and Container Storage Capacity	Application (Part A)
III.B	Condition of Containers	§264.171
III.C	Compatibility of Waste	§264.172
III.D	Management of Containers	§264.173
III.E	Containment	§264.175
III.F	Special Requirements for Ignitable or Reactive Waste	§264.176
III.G	Special Requirements for Incompatible Wastes	§264.177
III.H	Compliance Schedule	*

* The Permittee will be required to construct a secondary containment system used for the storage of Type Is, I, II, and III hazardous wastes that will comply with 40 CFR §264.175. The U.S. EPA must receive proper certification that this activity has been completed within 45 days following the date of issuance of this permit. If this certification is not submitted, the storage of hazardous waste in containers must cease.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

Name of Permittee: Commerce Industrial Chemicals

Facility Location: 5611 W. Woolworth Ave., Milwaukee, Wisconsin

EPA Identification Number: WID980795181

Effective Date: 30 days after service of notice of decision requested under 40 CFR 124.19.

Expiration Date: Ten (10) years after the effective date

Authorized Activities

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 USC §6901 et seq., commonly known as RCRA, the Hazardous and Solid Waste Amendments (HSWA) of 1984, and regulations promulgated thereunder by the U.S. Environmental Protection Agency (U.S. EPA) codified and to be codified in Title 40 of the Code of Federal Regulations), a permit is issued to Commerce Industrial Chemicals (hereafter called the Permittee), to operate a hazardous waste storage facility located in Milwaukee, Wisconsin at latitude 88° 58' 15.", and longitude 43° 08' 00". You are authorized to conduct the following hazardous waste management activities:

_X_ Storage	_X_ Treatment	___ Disposal
_X_ Container	___ Tank	___ Injection Well
_X_ Tank	___ Surface Impoundment	___ Landfill
___ Waste Pile	_X_ Incinerator	___ Land Application
___ Surface Impoundment	___ Other	___ Ocean Disposal
		___ Surface Impoundment

Applicable Regulations:

The conditions of this permit were developed in accordance with the applicable provisions of 40 CFR Part:

_X_ 261	_X_ 264, Subpart G	___ 264, Suhpart L
_X_ 262	_X_ 264, Subpart H	___ 264, Subpart M
_X_ 264, Subparts A-E	_X_ 264, Subpart I	___ 264, Subpart N
___ 264, Subpart F	_X_ 264, Subpart J	_X_ 264, Subpart O
_X_ HSWA	___ 264, Subpart K	_X_ 270

Permit Approval

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 40 CFR Parts 260 through 264 and 270 and 124 as specified in the permit and relevant provisions of HSWA. Applicable regulations are those which are in effect on the date of issuance of this permit (see 40 CFR §270.32(c)).

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This permit is based on the assumption that the information submitted in the permit application attached to the Permittee's letter dated February 9, 1983, and any subsequent amendments (hereafter referred to as the application) is accurate and that the facility will be constructed and operated as specified in the application. Any inaccuracies found in this information may be grounds for the termination or modification of this permit (see 40 CFR §270.42 and §270.43) and potential enforcement action. The Permittee must inform U.S. EPA of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (the Amendments) were enacted to modify RCRA. Under Section 206 of the Amendments, all RCRA permits issued after the date of enactment must provide for corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit. Based on information submitted by Permittee on March 12, 1985, and subsequent review of such information by the State of Wisconsin and U.S. EPA, it has been established that the Permittee has not released hazardous constituents from any solid waste management unit to the environment.

Issued this 27 th day of September, 1985

by Basil G. Constantelos

Basil G. Constantelos, Director
Waste Management Division

I. STANDARD CONDITIONS

A. EFFECT OF PERMIT

The Permittee is allowed to store and incinerate hazardous waste in accordance with the conditions of this permit. Any storage or incineration of hazardous waste not authorized in this permit is prohibited. Compliance with this permit constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under Section 3013 or Section 7003 of RCRA, Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9606(a), commonly known as CERCLA), or any other law providing for protection of public health or the environment.

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 270.41, 270.42, and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. DUTIES AND REQUIREMENTS

1. Duty to Comply. The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, constitutes a violation of RCRA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

2. Duty to Reapply. If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must submit a complete application for a new permit at least 180 days before this permit expires.

3. Permit Expiration. The duration of this permit shall be ten years from the effective date of the permit in conformance with the provisions of 40 CFR 270.50. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (see 40 CFR 270.13-270.29) and through no fault of the Permittee the Regional Administrator has not issued a new permit as set forth in 40 CFR 270.15.

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate. The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

6. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of the permit.

7. Duty to Provide Information. The Permittee shall furnish to the Regional Administrator, within a reasonable time, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

8. Inspection and Entry. The Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

   (a) Enter at reasonable times upon the Permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

9. Monitoring and Records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, (July, 1982) or an equivalent method as specified in the attached Waste Analysis Plan.

(b) The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or record. These periods may be extended by request of the Regional Administrator at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

(c) Records of monitoring information shall specify:

(i) The dates, exact place, and times of sampling or measurements;

(ii) The individuals who performed the sampling or measurements;

(iii) The dates analyses were performed;

(iv) The individuals who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

10. Reporting Planned Changes. The Permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility.

11. Certification of Construction or Modification. The Permittee may:

1. Not commence the shakedown phases of operation for the hazardous waste incinerator; or

2. Not commence the incineration of Type II hazardous waste at the facility; or

3. Not continue storing hazardous wastes in containers; or

4. Not store hazardous waste in the incinerator feed tank until:

(a) The Permittee has submitted to the Regional Administrator by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and,

(b) (i) The Regional Administrator has inspected the modified and newly constructed facility and finds it is in compliance with the conditions of the permit; or;

(ii) The Regional Administrator has either waived the inspection or has not within 15 days notified the Permittee of his or her intent to inspect.

12. Anticipated Noncompliance. The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

13. Transfer of Permits. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 40 CFR 270.41(b)(2) or 270.42(d). Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270.

14. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

15. Twenty-four Hour Reporting. The Permittee shall report to the Regional Administrator any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:

    (a) Information concerning the release of any hazardous waste which may endanger public drinking water supplies.

    (b) Any information of a release or discharge of hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

        (i) Name, address, and telephone number of the owner or operator;

        (ii) Name, address, and telephone number of the facility;

        (iii) Date, time, and type of incident;

        (iv) Name and quantity of materials involved;

        (v) The extent of injuries, if any;

        (vi) An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

        (vii) Estimated quantity and disposition of recovered material that resulted from the incident

A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee need not comply with the five day written notice requirement if the Regional Administrator waives the requirement and the Permittee submits a written report within fifteen days of the time the Permittee becomes aware of the circumstances.

16. Other Noncompliance. The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time monitoring reports, as required by this permit are submitted. The reports shall contain the information listed in condition I.D.15.

17. Other Information. Whenever the Permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator, the Permittee shall promptly submit such facts or information.

E. Signatory Requirement. All reports or other information requested by the Regional Administrator shall be signed and certified as required by 40 CFR 270.11.

F. Confidential Information. The Permittee may claim confidential any information required to be submitted by this permit in accordance with 40 CFR 270.12.

G. Documents To Be Submitted Prior to Operation. The Permittee must submit:

1. As-built drawings showing that a fence has been constructed around the incinerator in accordance with 40 CFR 264.14 and this permit. These drawings must be received before the shakedown phase of incineration may commence.

2. As-built drawings showing that the incinerator and automatic waste feed cut-off systems have been constructed in accordance with this permit, and that the overflow return line has been installed in the incinerator feed tank. These drawings must be received before the shakedown phase of incineration may commence.

3. As-built drawings for the secondary containment system 45 days following the effective date of this permit.

4. Calibration charts relating fan amperage or an alternative flow monitoring parameter to combustion gas volumetric flow rate and combustion zone measure shall also be submitted.

5. Calibration charts relating waste feed in gallons/hr for the flow meter installed on the incinerator to comply with 40 CFR 264.345(b)(2). I.G.4 and 5. must be received by U.S. EPA prior to incineration of Type II hazardous wastes in order to comply with this permit.

6. Documents demonstrating continuous compliance with the requirements of 40 CFR 264.147 and the requirements of 40 CFR 264.151, including the requirements to have and maintain liability coverage for sudden and accidental occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs, or demonstrating continuing efforts to obtain this coverage within 90 days following the date of issuance of this permit.

H. Documents To Be Maintained at Facility Site. The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and amendments, revisions and modifications to these documents:

1. Waste analysis plan as required by 40 CFR 264.13 and this permit.

2. Personnel training documents and records as required by 40 CFR 264.16(d) and this permit.

3. Contingency plan as required by 40 CFR 264.53(a) and this permit.

4. Closure plan as required by 40 CFR 264.112(a) and this permit.

5. Cost estimate for facility closure as required by 40 CFR 264.142(d) and this permit.

6. Operating record as required by 40 CFR 264.73 and this permit.

7. Inspection schedules as required by 40 CFR 264.15(b) and this permit.

II. GENERAL FACILITY CONDITIONS

A. Design and Operation of Facility. The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

B. Required Notice.

(1) The Permittee shall notify the Regional Administrator in writing at least four weeks in advance of the date the permittee expects to receive hazardous waste from a foreign source. Notice of subsequent shipments of the same waste having the same EPA hazardous waste number from the same foreign source is not required.

(2) When the Permittee is to receive hazardous waste from an off-site source <except where the Permittee is also the generator>, it must inform the generator in writing that it has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the operating record. (See Condition II.L.1).

C. General Waste Analysis. The Permittee shall follow the procedures described in the attached waste analysis plan, Attachment 1. The Permittee may accept for storage and treatment only those hazardous wastes generated by the manuafacture and use of products distributed by or through Commerce Industrial Chemicals and shall not store or burn any other hazardous wastes. The types of hazardous wastes which can be accepted are listed in conditions III.A, IV.A, and V.C. The Permittee shall test all wastes in accordance with the waste analysis plan, Attachment 1.

D. Security. The Permittee shall comply with the security provisions of 40 CFR 264.14(b)(1) and (c).

E. General Inspection Requirements. The Permittee shall follow the inspection schedule, Attachment 2. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 40 CFR 264.15(c). Records of inspections shall be kept as required by 40 CFR 264.15(d).

F. Personnel Training. The Permittee shall conduct personnel training as required by 40 CFR 264.16. This training program shall follow the attached outline, Attachment 3. The Permittee shall maintain training documents and records as required by 40 CFR 264.16(d) and (e).

G. General Requirements for Ignitable, Reactive, or Incompatible Waste. The Permittee shall comply with the requirements of 40 CFR 264.17(a).

H. Preparedness and Prevention

1. Required Equipment. At a minimum, the Permittee shall equip the facility with the equipment set forth in the contingency plan, Attachment 4 as required by 40 CFR 264.32.

2. Testing and Maintenance of Equipment. The Permittee shall test and maintain the equipment specified in the previous permit condition as necessary to assure its proper operation in time of emergency.

3. Access to Communications or Alarm System. The Permittee shall maintain access to the communications or alarm system as required by 40 CFR 264.34.

4. Required Aisle Space. At a minimum, the Permittee shall maintain aisle space as required by 40 CFR 264.35.

5. Arrangements with Local Authorities. The Permittee shall attempt to make arrangements with State and local authorities as required by 40 CFR 264.37. If State or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

I. Contingency Plan.

1. Implementation of Plan. The Permittee shall immediately carry out the provisions of the contingency plan, Attachment 4, and follow the emergency procedures described by 40 CFR 264.56 whenever there is a fire, explosion, or release of hazardous waste or constituents which threatens or could threaten human health or the environment.

2. Copies of Plan. The Permittee shall comply with the requirements of 40 CFR 264.53.

3. Amendments to Plan. The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 40 CFR 264.54.

4. Emergency Coordinator. The Permittee shall comply with the requirements of 40 CFR 264.55, concerning the emergency coordinator.

J. Manifest System. The Permittee shall comply with the manifest requirements of 40 CFR 264.71, 264.72, and 264.76.

K. Recordkeeping and Reporting.

1. Operating Record. The Permittee shall maintain a written operating record at the facility in accordance with 40 CFR 264.73(a), (b)(1), (2), (3), (4), (5), (6), (7), and (8).

2. Biennial Report. The Permittee shall comply with the biennial report requirements of 40 CFR 264.75.

L. Closure.

1. Performance Standard. The Permittee shall close the facility as required by 40 CFR 264.111 and in accordance with the closure plan, Attachment 5.

2. Amendment to Closure Plan. The Permittee shall amend the closure plan in accordance with 40 CFR 264.112(b) whenever necessary.

3. Notification of Closure. The Permittee shall notify the Regional Administrator at least 180 days prior to the date he expects to begin closure.

4. Time Allowed For Closure. After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste in accordance with the schedule specified in the closure plan, Attachment 5. After receiving the final volume of hazardous waste, the Permittee shall complete closure activities in accordance with the schedule specified in the closure plan, Attachment 5.

5. Disposal or Decontamination of Equipment. The Permittee shall decontaminate and/or dispose of all facility equipment as required by 40 CFR 264.114 and the closure plan, Attachment 5.

6. Certification of Closure. The Permittee shall certify that the facility has been closed in accordance with the specifications in the closure plan as required by 40 CFR 264.115.

M. Cost Estimate for Facility Closure. The Permittee's original closure cost estimate, prepared in accordance with 40 CFR 264.142(a), is specified in Attachment 5.

1. The Permittee must adjust the closure cost estimate for inflation within 30 days after each anniversary of the date on which the first closure cost estimate was prepared, as required by 40 CFR 264.142(b).

2. The Permittee must revise the closure cost estimate whenever there is a change in the facility's closure plan as required by 40 CFR 264.142(c).

3. The Permittee must keep at the facility the latest closure cost estimate as required by 40 CFR 264.142(d).

N. Financial Assurance for Facility Closure. The Permittee shall demonstrate continuous compliance with 40 CFR 264.143 by providing documentation of financial assurance, as required by 40 CFR 264.151, in at least the amount of the cost estimates required by permit condition II.M. Changes in financial assurance mechanisms must be approved by the Regional Administrator pursuant to 40 CFR 264.143.

O. Liability Requirements. The Permittee shall demonstrate continuous compliance with the requirements of 40 CFR 264.147 and the documentation requirements of 40 CFR 264.151, including the requirements to have and maintain liability coverage for sudden and accidental occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs, or demonstrate continued efforts to obtain such coverage.

P. Incapacity of Owners or Operators, Guarantors, or Financial Institutions.

The Permittee shall comply with 40 CFR 264.148 whenever necessary.

Q. Waste Minimization.
The Permittee must certify at least biennially that the volume and toxicity has been reduced to the maximum degree economically practicable and the method used to manage the waste minimizes risk to the extent practicable in accordance with 40 CFR 262.41 and 264.73.

R. Compliance Schedule. The Permittee shall comply with Condition II.O within 90 days from the date of issuance of this permit. If after one year following the date of issuance of this permit, the Permittee is unable to provide appropriate coverage, then this condition must be renegotiated in accordance with 40 CFR 270.41.

III. STORAGE IN CONTAINERS

A. Waste Identification. The Permittee may store the following wastes in containers at the facility, subject to the terms of this permit; and 40 CFR 264.31:

Waste Type		Waste Code
a.	Ignitable Wastes (Type I, Is)	D001
b.	Spent halogenated solvents used in degreasing (Type III)	F001
c.	Spent halogenated solvents (Type III)	F002
d.	Spent non-halogenated solvents (Type I, Type Is)	F003
e.	Spent non-halogenated solvents (Type II)	F005
f.	Solvent washes and sludges used in the formation of printing ink (Type II)	K086

These wastes were indicated on page #3 of Form #3 of Part A of the Applicant's Hazardous Waste Permit Application, Attachment 6. The Permittee may store these wastes in 55-gallon capacity drums in the secondary containment area as described in Condition III.E, provided that the total quantity of drums stored, never exceeds 396 at any one time. Containers of Type III hazardous waste, which may not be incinerated, shall be physically separated from Type I and Type II hazardous wastes. Type Is hazardous waste shall be labelled and isolated from other hazardous waste after it is identified.

B. Condition of Containers. If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit.

C. Compatibility of Waste with Containers. The Permittee shall assure that the ability of the container to contain the waste is not impaired as required by 40 CFR 264.172.

D. Management of Containers. The Permittee shall manage containers as required by 40 CFR 264.173.

E. Containment. The Permittee shall construct a secondary containment system and maintain the containment system in accordance with the requirements of 40 CFR 264.175 as specified in the attached plans and specifications, Attachment 7.

F. Special Requirements for Ignitable or Reactive Waste. The Permittee shall not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility's property line.

G. Special Requirements for Incompatible Waste.

1. Prior to placing incompatible waste or incompatible wastes and materials in the same container, the Permittee shall comply with 40 CFR 264.17(b) as specified in Attachment 7.

2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.

3. The Permittee shall separate containers of incompatible wastes as indicated in the attached plans, Attachment 7, as required by 40 CFR 264.177(c).

4. The Permittee must document compliance with III.G (1) and (2) as required by 40 CFR 264.17(c) and place this documentation in the operating record (condition II.K.1).

H. Compliance Schedule. Within 45 days from the effective date of this permit, the Permittee shall construct a secondary containment system to comply with 40 CFR 264.175. Pursuant to the certification requirement of I.D.11, the storage of hazardous wastes in containers must cease if the containment system is not constructed within the required time frame.

IV. STORAGE IN TANKS

A. Waste Identification. The Permittee may store the following hazardous wastes in the feed tank to the incinerator at the facility, subject to the terms of this permit, and 40 CFR 264.31:

Waste type		Waste Code
a.	Ignitable Wastes (Type I, Is)	D001
b.	Spent non-halogenated solvents (Type I, Is)	F003
c.	Spent non-halogenated solvents (Type II)	F001
d.	Solvent washes used in the formulation of printing ink (Type II)	K086

These wastes were indicated on page #3 of form #3 of Part A of the Permittee's Hazardous Waste Permit Application, Attachment 6. The incinerator feed tank has been fabricated to specifications listed in Attachment 8. These wastes shall not be pumped into the tank unless the overflow return line is operating.

B. Design of Tanks. The Permittee shall maintain all tanks as required by 40 CFR 264.191, as specified in the attached plans and specifications Attachment 8. The Permittee shall maintain the minimum shell thickness of 0.098 inches at all times to ensure sufficient shell strength. The shell thickness of the tank must be determined annually, and records of testing must be maintained as part of the operating record.

C. General Operating Requirements. The Permittee shall prevent overfilling of tanks, as required by 40 CFR 264.192(b), by the methods specified in Attachment 8.

D. Special Requirements for Ignitable or Reactive Wastes.

1. The Permittee shall not place ignitable or reactive waste in a tank unless the procedures described in Attachment 8 are followed, as required by 40 CFR 264.198(a).

2. The Permittee shall document compliance with IV.D.1 as required by 40 CFR 264.17(c) and place this documentation in the operating record (condition II.K.1).

3. The Permittee shall maintain buffer zones around covered tanks as specified in Attachment 8, as required by 40 CFR 264.198(b).

E. Special Requirements for Incompatible Wastes.

1. The Permittee shall not place incompatible wastes in the same tank or place hazardous waste in a tank that previously held an incompatible waste or material unless the procedures specified in Attachment 8 are followed, as required by 40 CFR 264.17(b).

2. The Permittee shall document compliance with IV.E.1 as required by 40 CFR 264.17(c) and place this documentation in the operating record (condition II.K.1).

F. Compliance Schedule.

Before hazardous waste may be stored in the incinerator feed tank, the Permittee shall install an overflow return line to comply with 40 CFR 264.192(b) and a separate storage tank and feed line to the incinerator for Type Is hazardous waste. Pursuant to the certification requirement of I.D.11, the storage of hazardous wastes in the incinerator feed tank shall not be permitted if the overflow return line and feed modifications are not installed.

V. INCINERATION

A. Construction. The Permittee shall construct and maintain the incinerator in accordance with the attached plans and specifications, Attachment 8. The Permittee shall not feed hazardous waste to the incinerator until Conditions I.D.11 and IV.F, and V.E have been complied with.

B. Performance Standard. The Permittee shall construct and maintain the incinerator so that, when operated in accordance with the operating requirements, specified in this permit, it will meet the following performance standards.

1. The incinerator must achieve a destruction and removal efficiency (DRE) of 99.99% for each principal organic hazardous constituent (POHC) designated in this permit for each waste feed. DRE shall be determined using the method specified in 40 CFR 264.343(c).

2. The Permittee must control hydrogen chloride (HCl) emissions, such that the rate of emissions is no greater than the larger of either 1.8 Kg/hr or 1% of the HCl in the stack gas prior to entering any pollution control equipment.

3. The incinerator must not emit particulate matter in excess of 180 milligrams per dry standard cubic meter when corrected for the amount of oxygen in the stack gas in accordance with the formula specified in 40 CFR 264.343(c).

4. Compliance with the operating conditions specified in this permit will be regarded as compliance with the above performance standards. However, evidence that compliance with such permit conditions is insufficient to ensure compliance with the above performance standards may be "information" justifying modification, revocation or reissuance of the permit pursuant to 40 CFR 270.41.

C. Limitation On Wastes: Except during the periods specified in conditions VI.A and B, the Permittee shall incinerate the following hazardous wastes only as allowed by the terms of this permit; organic halogenated hazardous wastes shall not be incinerated.

- The POHC shall be carbon tetrachloride.
- The Permittee shall not incinerate any hazardous waste having a heat of combustion less than 0.24 Kcal/gm, (carbon tetrachloride).
- The ash content of the waste shall be no greater than 1.7 %

- The physical form of the waste shall be liquid having a viscosity not exceeding 11.1 cps at 25° C.

- No waste or combination of waste, as fed to the incinerator shall have a heating value of less than 590,000 Btu/hr. This corresponds to a minimum heating value of 6,552 Btu/lb in the hazardous waste at a minimum feed rate shall never exceed 15.0+ 15% gallons/hr.

D. Operating Conditions: Except during the periods specified in conditions VI.A and B, the Permittee shall feed Type I and Type II wastes described in condition V.C to the incinerator only under the following operating conditions:

1. Combustion temperature, measured as specified in condition V.D.7 shall be maintained between 1700°F and 2300°F.

2. Combustion gas velocity, measured as specified in Condition V.D.7, shall be no greater than 2850 ft/min (actual).

3. Stack gas concentration of carbon monoxide, measure as specified in condition V.D.7, shall not exceed 100 ppm.

4. During start-up and shut-down of the incinerator, Type I and II hazardous waste shall not be introduced into the incinerator. Type is hazardous waste may be used for start-up.

5. The Permittee shall control fugitive emissions from the combustion zone of the incinerator by maintaining combustion zone pressure lower than atmospheric pressure. A negative pressure of at least 0.10 inches of water must be maintained during operation.

6. The Permittee shall construct, maintain and calibrate the system specified below to automatically cut off Type I and II hazardous waste feed to the incinerator at the levels specified below when the operating conditions deviate from the limits etablished herein.

	System	Cut off limits	Calibration Frequency	Test Frequency
a.	Pump inlet pressure	> 20 in Hg vacuum	annually	monthly
b.	Pump outlet pressure	> 50 psi	annually	monthly

	System	Cut Off Limits	Calibration Frequency	Test Frequency
c.	Air pressure switch	< 50 psi	annually	weekly
d.	Main chamber temperature	< 1300°F > 1600°F	annually	daily
e.	Secondary chamber temperature	< 1700°F > 2300°F	annually	daily
f.	Waste feed rate	> 15.0 ± 15% gallons/hr	annually	weekly
g.	Combustion gas velocity	> 2850 ft/min (actual)	annually	weekly
h.	Carbon monoxide	> 100 ppm	daily	daily

7. The Permittee shall monitor the facility as specified below:

	System	Purpose	Frequency of Monitoring
a.	Carbon Monoxide concentration exceeds 100 ppm	shut-down if stack exceeds 100 ppm	continuous
b.	Secondary Chamber Temper-ature	maintain 1700-2300°F range	continuous
c.	Main Chamber Temper-ature	maintain 1300-1600°F range	continuous
d.	Waste feed rate	should not exceed 15.0 ± 15% gallons per hour	continuous
e.	Combus-tion gas velocity	should not be greater than 2800 ft/min (actual)	continuous

	System	Purpose	Frequency of Monitoring
f.	Manual override switch	check position must be in "Hazardous" position except when Type I waste is being burned	daily

8. Upon request of the Regional Administrator, the Permittee shall perform the tests required by 40 CFR 264.347(a)(3).

9. The Permittee shall record and maintain the monitoring and inspection data as required by 40 CFR 264.347(d).

10. The Permittee must cease feeding waste when changes in waste feed or operating conditions exceed limits designated in this permit.

11. Type I hazardous waste is defined as Type I hazardous waste in which the absence of 40 CFR 261 Appendix VIII hazardous constituents has been verified by chemical analysis.

12. The Permittee shall maintain and operate the incinerator to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment in accordance with 40 CFR 264.31.

E. Compliance Schedule: Within 45 days from the date of issuance of this permit, the Permittee must revise the incinerator's control system such that waste feed cut-off will occur automatically whenever any operating condition specified in Condition V.D.6 deviates from the specified level. The Permittee shall also install 1) a carbon monoxide monitor system and alarm to satisfy the requirements of 40 CFR 264.347 and, 2) a device to indirectly monitor combustion gas velocity to comply with 40 CFR 345(b)(4). Pursuant to the certification requirement of I.D.11, the incineration of any hazardous waste shall not occur if these activities have not been completed.

VI. INCINERATOR SHAKEDOWN PERIOD

A. Shakedown Period. During the shakedown period (the period beginning with the initial introduction of Type I hazardous wastes into the incinerator), the Permittee shall comply with the following conditions:

1. Duration of Shakedown Period. The shakedown period shall not exceed 720 hours of operation when burning hazardous wastes. The Permittee may petition the Regional Administrator for one extension of the shakedown period for up to 720 additional hours. The Regional Administrator may grant the extension when good cause is demonstrated in the petition in accordance with 40 CFR 264.344(c)(1).

2. Waste Feed Identification. During the shakedown period the Permittee may feed the following wastes at the facility, subject to the requirements of condition VI.A.3. The Permittee may incinerate only hazardous wastes which have been classified as Type I and Type Is. These wastes have met the exemption criteria under 40 CFR 264.340(b)(1) and (2). As described in Attachment 1, a portion of the Type I wastes shall be sampled and analyzed for 40 CFR 261 Appendix VIII hazardous waste constituents which might reasonably be expected to be present in the waste. If these constituents are found to be absent in the Type I waste, it will be reclassified as Type Is hazardous waste. Type Is hazardous waste shall be utilized as a start-up fuel for the incinerator. During the shakedown period, Type II hazardous waste shall not be incinerated. Type I hazardous wastes shall not be introduced into the incinerator during start-up and shutdown.

3. Operating Conditions. Incinerator shakedown shall not begin until the requirements of Condition V.A have been met. Operating conditions V.D.1, 2, and 3 shall be met during the shakedown period. The Permittee shall monitor the facility during the shakedown period as described in V.D.7, and follow the procedures described in the Waste Analysis Plan, Attachment 1.

   a. Upon request of the Regional Administrator, the Permittee shall perform the test required by 40 CFR 264.347(a)(3).

   b. The Permittee shall record and maintain monitoring and inspection data as required by 40 CFR 264.347(d).

c. Except where otherwise stated, all conditions of Sections I, II, III, and IV of this permit must followed during the shakedown period.

d. the Permittee must cease operation when changes in waste feed or operating conditions exceed limits designated in this permit.

B. Compliance Schedule During the shakedown period, the Permittee shall construct calibration charts of the induced draft fan or other flow monitoring equipment. These charts will relate pressure drop, temperature, fan amperage, or other flow monitoring equipment parameters to combustion gas velocity or volumetric flow rate, and to combustion zone pressure. The Permittee must alos develop calibration charts relating waste feed rate in gallons/hr for the flow meter installed on the incinerator to comply with 40 CFR 264.345(b)(2) and conditions I.G and V.C of this permit. These charts shall be submitted following completion of the shakedown period, but before the burning of Type II hazardous wastes will be permitted in accordance with condition I.G. In accordance with the certification stating that the shakedown period has been sucessfully completed, signed by an independent registered professional engineer, must be received by U.S. EPA before burning of Type II hazardous waste will be permitted.